SMART MONEY

Informing Higher Education Philanthropy

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EXECUTIVE SUMMARY

Over the past decade, expectations about the role of private philanthropy in expanding access to and success in postsecondary education have increased. These expectations are based on assumptions that philanthropic organizations—both national and community foundations—can enhance the capacity and performance of postsecondary institutions. These organizations can provide direct support for programs and convenings; assist students with financial, academic, and social preparation; and influence the adoption of federal and state policies.

Intended to inform philanthropic decision making, this report describes how local and regional economic and civic clusters offer distinct opportunities for private philanthropy to support postsecondary education.

The recent funding actions of private philanthropy demonstrate support for postsecondary access and success initiatives. Between 2007 and 2010, for example, private philanthropy committed upwards of $6.3 billion to postsecondary education institutions or related enterprises **(SEE FIGURE 1)**.

Given the significant allocation of resources private philanthropy continues to make in support of postsecondary education, it is essential that funding decisions be properly informed and address key questions such as:

- *What activities* should be funded,
- Toward *what* goal,
- At *what level* of support,
- For *how long,* and
- *Where*.

Ideally, well-reasoned resource allocation decisions are grounded in empirical evidence of target area or group needs, as well as strategic considerations of prior and ongoing initiatives and relationships that could support advancement of funder goals. Funding decisions also need to recognize and adapt to an emergent demographic profile of the nation; one that is increasingly more metropolitan.

America's Metropolitan Landscape

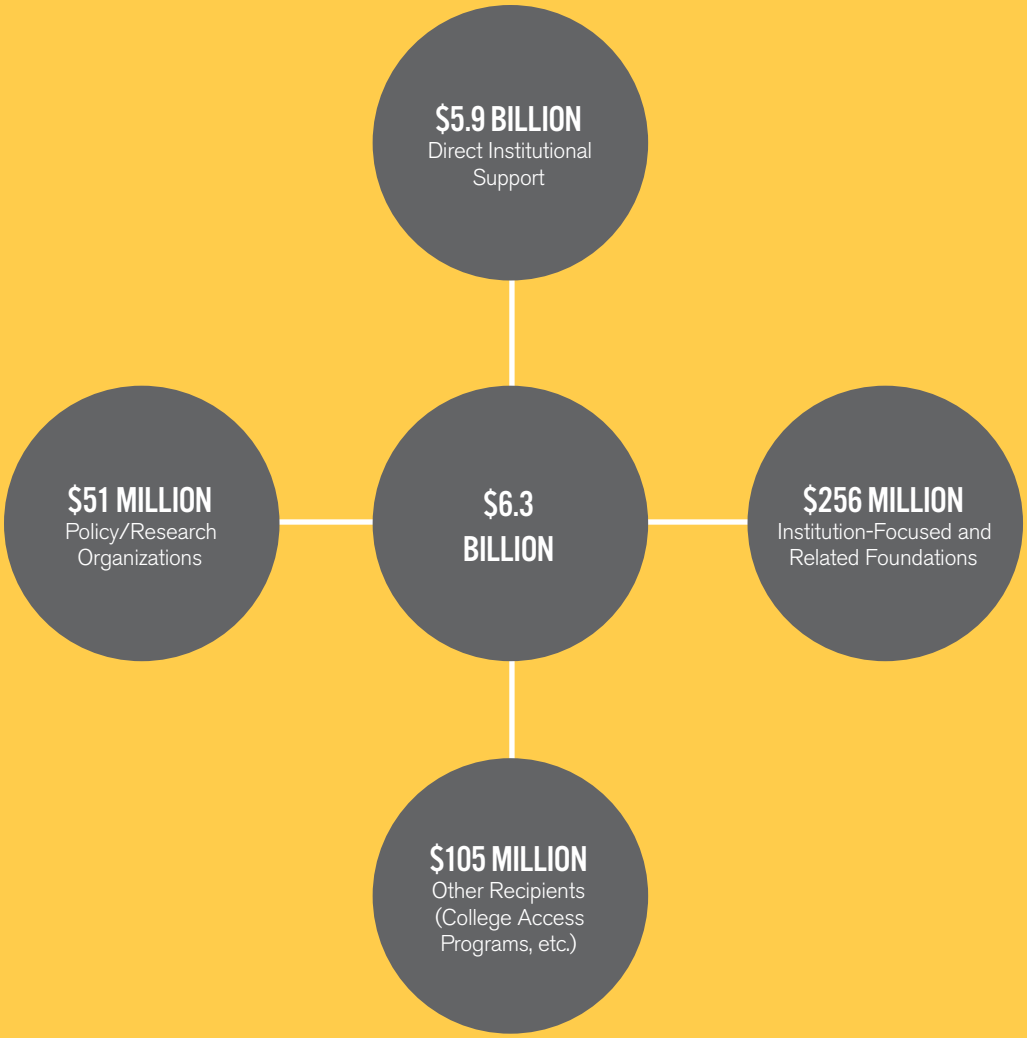
The face of the American landscape is overwhelmingly metropolitan, making metro areas important spaces for philanthropy to explicitly consider when crafting postsecondary funding strategies. This is the case for two primary reasons. First, metropolitan areas are drivers of economic activity and innovation. Over three-quarters of the nation's economic output and nearly 9 out of 10 jobs are found in the nation's metro areas.[1]

Second, four out of every five Americans—nearly one-quarter billion individuals—live in a metropolitan area; locations that are expected to grow well into the next decade. More critically, underrepresented populations, such as those from low-income or first-generation college-going families, racial/ethnic minorities, and displaced workers, overwhelmingly

[1] Metropolitan Policy Program. 2010. *State of Metropolitan America.* The Brookings Institution: Washington, D.C.

FIGURE 1

Private Philanthropy Commitments to Postsecondary Education, 2007–10[2]



[2] Data on grant recipients were retrieved using the Foundation Center's Philanthropy In/Sight database. This database pulls from over 97,000 foundations and grantmaking public charities in the United States. From this dataset, information was extracted on grant recipients from 2007 to 2010 whose grant subject pertained to higher education. The results contained the recipient's name, city, state, total grant amount, and the total number of grants received. These recipients were then placed into one of four categories based on their mission and function: Higher education institutions; policy/research organizations; foundations; and other.

FIGURE 2

Quadrants, Representing Educational Need and Extent of Inertia

The *Targeted Programs* quadrant shows it will require engaging leaders at public, four-year institutions to increase existing efforts to enroll local high school graduates from disadvantaged backgrounds.

live in these areas.[3] New access and success initiatives aimed at eliminating persistent educational attainment gaps of underrepresented groups must therefore pay heed to the nation's residential patterns and demographic trends.

A Focus on Meeting Placed-Based Educational Need

With the importance of metropolitan areas in mind, this report offers a unique and innovative approach for assisting national and community foundations in crafting answers to critical questions such as:

- *Where* to engage in funding activities,
- For *how long*, and
- *What types of activities* are likely to succeed in specific metropolitan areas.

Intended to inform philanthropic decision making, the empirical analysis presented in this report describes how metropolitan areas offer distinct opportunities for private philanthropy to support postsecondary education practice and degree attainment goals. Toward this end, the report maps the nation's metropolitan areas[4] into designated *quadrants* (or action zones) and articulates how this placement should inform philanthropic efforts in these areas.

Informing Philanthropic Activities: Mapping Metropolitan Areas to Quadrants

Using national data, four quadrants were developed to capture the distinct local demographic, economic, and policy contexts of metropolitan areas. Following empirical analysis, each metropolitan area was mapped into a specific quadrant, offering insight into the type of philanthropic intervention that would be most appropriate for that space to meet education and economic needs; **FIGURE 2** illustrates the quadrants.

The mapping of each metropolitan area into a quadrant was the result of calculations along two dimensions: Current educational need—reflected in the percentage of adults with a college degree in 2009—and extent of inertia present in a metro area—measured by the change in the college degree attainment rate from 2000 to 2009. Placement of a metropolitan area in a given quadrant is therefore a result of both the current degree attainment rate and the change in that rate over the past decade.

As a result of the analysis, 22 percent of the 267 metro areas used in analysis are placed in the *Targeted Programs* quadrant, 16 percent in the *Capacity Building* quadrant, 36 percent in the *Large-Scale Investment* quadrant, and 26 percent in the *Workforce Development* quadrant.

Brief descriptions of each quadrant, as well as topline considerations for successful philanthropic interventions in these metropolitan areas are provided below. **FIGURE 3** describes each quadrant and provides links to profiles of successful interventions for these spaces.

Targeted Programs

Metropolitan areas in the *Targeted Programs* quadrant have the highest degree attainment rates and the largest increase in this rate from the start of the decade. With one in five of these areas home to a state flagship university and more public two- and four-year postsecondary institutions located within their boundaries than any other quadrant, these metro spaces are rich with postsecondary options.

Ongoing economic challenges in these areas, specifically the growing rates of Blacks and Latinos in poverty, will increase the number of disadvantaged students interested in exploring these options.

[3] Metropolitan Policy Program. 2010. *State of Metropolitan America.* The Brookings Institution: Washington, D.C.

[4] Based on data gathered by the Census Bureau, the U.S. Office of Management and Budget defines Metropolitan Statistical Areas (MSAs) as areas associated with at least one urbanized area that has a population of at least 50,000. MSAs comprise a central county or counties containing the core, urbanized center plus adjacent outlying counties having a high degree of social and economic integration with the central county or counties as measured through commuting. For the analysis undertaken in this report 267 MSAs were used in the analysis.

The most striking feature of the *Capacity Building* quadrant is the large percentage of individuals who are 18 years old or younger.

Given the local contexts of these metropolitan areas, the ideal *Targeted Programs* intervention will engage leaders at public, four-year institutions to step up existing efforts to increase the enrollment of local high school graduates from disadvantaged backgrounds, as well as transfer students from neighboring community colleges.

Capacity Building

Although the degree attainment rates in the metropolitan areas in the *Capacity Building* quadrant are the second highest of the four quadrants, the improvement in their degree attainment rate since 2000 has been modest. The most striking feature of this quadrant is the large percentage of individuals who are 18 years old or younger. Couple this with the fact that public, flagship universities are least likely to be located in these metro areas compared to those in other quadrants, and the need to enhance postsecondary educational opportunities is clear.

The ideal *Capacity Building* intervention will award grants to community colleges to improve both institutional and instructional capacity through brick-and-mortar and online expansion, as well as incentives to increase the faculty ranks at community colleges and minority-serving institutions.

The *Large-Scale Investment* quadrant has the lowest overall degree attainment rates of any quadrant and has progressed the slowest over the last decade in improving that rate.

Large-Scale Investment

The *Large-Scale Investment* quadrant has the lowest overall degree attainment rates of any quadrant and has progressed the slowest over the last decade in improving that rate. The metropolitan areas in this quadrant are, on average, worse off economically compared to other metro areas. Low household income, particularly for Black and Latino households, and limited postsecondary options within each metro area will hamstring efforts to improve college access and success.

In many ways, the educational challenges that exist in these metropolitan areas require drastic investments in pre-college programs over a number of years, if not generations. Therefore, the ideal *Large-Scale Investment* intervention will provide long-term assistance to K-12 school districts to establish and augment a wider range of academic and social supports that reduce drop outs and improve college readiness, such as college preparatory courses, early college awareness programming, and summer bridge programs.

Workforce Development

Metropolitan areas in the *Workforce Development* quadrant have degree attainment rates similar to *Large-Scale Investment* areas, but unlike those areas, there has been substantial improvement in *Workforce Development* area rates since 2000.

The economic conditions of metropolitan spaces in this quadrant lag noticeably behind other quadrants. In recent years these metropolitan areas have seen a further dwindling of manufacturing occupations coupled with high rates of Blacks and Latinos in poverty. Thus, interventions that link work-based skills to the classroom and then back to the workplace have the best chance of succeeding in these areas.

The ideal *Workforce Development* intervention will, in partnership with local private foundations, target key community groups and labor organizations to further develop wrap-around educational, (re)training, and employment services for adult learners and displaced workers.

Moving Postsecondary Philanthropy Forward

Private philanthropy will continue to play a vital role in assisting students, postsecondary institutions, and communities in moving toward national degree attainment goals. To assist leaders of philanthropy in crafting initiatives that are likely to be successful, this report highlights the critical necessity of addressing educational need in metropolitan areas, and offers unique insights into the types of interventions that are most appropriate given current levels of educational attainment and historic performance. Considering metropolitan areas in this way advances the relevance of placed-based strategies for reaching educational attainment goals, and offers a framework for future strategic decision-making.

FIGURE 3

Quadrant Characteristics and Corresponding Intervention Profiles

***Targeted Programs* At-a-Glance**

- Forty-seven percent attainment in 2009, an increase of 4.2 percentage points since 2000
- One in five are home to a state flagship university
- Poverty rates of Blacks and Latinos are growing relative to Whites
- 6.4 million degrees needed to reach 60 percent attainment

Profile of Ideal *Targeted Programs* Intervention

Engage leaders at public, four-year institutions to step up existing efforts to increase the enrollment of local high school graduates from disadvantaged backgrounds, as well as transfer students from neighboring community colleges.

***Capacity Building* At-a-Glance**

- Forty-five percent of the adult population has a college degree, up from 43 percent since 2000
- Under 18-year-old "bubble" is approaching college
- Roughly one in 10 contains a flagship university
- 3.8 million degrees needed to reach 60 percent attainment

Profile of Ideal *Capacity Building* Intervention

Award grants to community colleges to improve both institutional and instructional capacity through brick-and-mortar and online expansion, as well as incentives to increase the faculty ranks at community colleges and minority-serving institutions.

***Large-Scale Investment* At-a-Glance**

- Forty percent attainment in 2009 and 38 percent attainment in 2000
- Fewest postsecondary options
- Lowest household income, particularly for Black and Latino households

Profile of Ideal *Large-Scale Investment* Intervention

Provide long-term assistance to K–12 school districts to establish and augment a wider range of academic and social supports that reduce school dropout and improve college readiness, such as after-school activities, college preparatory courses, and summer bridge programs.

***Workforce Development* At-a-Glance**

- Forty-two percent of adults have a degree, an increase of 4 percentage points since 2000
- Manufacturing occupations continue to dwindle
- Poverty is decreasing among Blacks and Latinos relative to Whites

Profile of Ideal *Workforce Development* Intervention

In partnership with local, private foundations, target key community groups and labor organizations to further develop wrap-around educational, (re)training, and employment services for adult learners and displaced workers.

INTRODUCTION AND CONTEXT

Over the past decade, expectations about the role of private philanthropy in expanding access to and success in postsecondary education have increased. These expectations are based on assumptions that philanthropic organizations—both national and community foundations—can enhance the capacity and performance of postsecondary institutions. These organizations can provide direct support for programs and convenings; assist students with financial, academic, and social preparation; and influence the adoption of public policies designed to increase educational attainment that will drive civic and economic development.

The recent funding actions of private philanthropy provide evidence that buttresses these assumptions and illustrate the significant role of philanthropy in supporting postsecondary access and success initiatives. Between 2007 and 2010, for instance, private philanthropy committed more than $6.3 billion to postsecondary education institutions or related enterprises. Nearly $6 billion went directly to institutions to support research, teaching, administrative activities, and capital improvements; $256 million went to institution-focused and related foundations; $51 million went to policy/research organizations to support convening, policymaking, and research activities; and $105 million was disbursed to other recipients, including college access programs, early awareness initiatives, and fiscal literacy toolkits.[5]

Given the significant resources that private philanthropy continues to provide in support of postsecondary access and success, funding decisions need to be properly informed and address several key questions, including: *what activities* to fund, toward *what goal*, at *what level* of support, for *how long*, and *where*. Ideally, well-reasoned resource allocation decisions are grounded in empirical evidence of target area or group needs, as well as strategic considerations of prior and ongoing initiatives and relationships that could support advancement of funder goals.

This report offers a unique and innovative approach for assisting national and community foundations in determining *where* to engage in funding activities, for *how long,* and with *what type* of activities. Guided by significant changes in national residential and demographic patterns, the empirical analysis presented here describes how local and regional economic and civic clusters offer distinct opportunities for private philanthropy to support postsecondary education practice and degree attainment goals.

This opening section of the report is an overview of the policy and philanthropic response to calls for increased educational attainment, highlighting how shifting residential and demographic patterns are changing both the where and the who of attainment discourse. Subsequent discussion centers on the role of metropolitan areas in analysis, categorizing each of the nation's metropolitan areas into distinct quadrants based on educational need and progress in addressing that need over time. Organizing metropolitan areas in this way provides a footing for discussing unique intervention types and policy strategies that are most likely to be successful in each quadrant—critical information for philanthropic decision-makers and other constituents of higher education.

Necessity of Increasing Degree Completions

National education leaders and prominent postsecondary education stakeholders are challenging institutions to dramatically increase the number of college graduates over the forthcoming decades. These calls for increased productivity and educational outputs are informed by current educational conditions, which some observers suggest are inadequate to meet future labor market demands.[6] Recent data pegs national postsecondary attainment at 35 percent for the population over age 25,

[5] Data on grant recipients were retrieved using the Foundation Center's Philanthropy In/Sight database. This database pulls from over 97,000 foundations and grantmaking public charities in the United States. From this dataset, information was extracted on grant recipients from 2007 to 2010 whose grant subject pertained to higher education. The results contained the recipient's name, city, state, total grant amount, and the total number of grants received. These recipients were then placed into one of four categories based on their mission and function: Higher education institutions; policy/research organizations; foundations; and other.

[6] Anthony P. Carnevale, Nicole Smith, and Jeff Strohl. 2010. *Help Wanted: Projections of Job and Education Requirements Through 2018*. Georgetown University Center on Education and the Workforce: Washington, D.C.

with variations across age, gender, and racial and ethnic groups.[7] Increasing attainment levels for all Americans is critical for meeting labor market needs, as upward of 60 percent of future job growth is projected to require workers with at least some level of postsecondary education.[8]

Government officials, postsecondary institutions, and the philanthropic community have taken various actions to increase the number of postsecondary degrees in the United States. For example, the current administration has challenged the nation's citizens to once again become the world's most educated country by 2020.[9] To accomplish this, the administration has placed postsecondary education squarely at the center of its domestic policy agenda, using the power of the bully pulpit to champion a fundamental overhaul to the federal student loan program, increase funding for student need-based financial aid in the form of Pell Grants, and significantly increase federal funding for minority-serving institutions and community colleges.[10]

At the state level, the National Governors Association launched *Complete to Compete*, an initiative intended to highlight the data requirements for effective postsecondary policymaking and the need for governors to take actions "to make our nation a global leader in college completion."[11] Additionally, state-focused organizations such as the State Higher Education Executive Officers, the Education Commission of the States, and the four regional higher education compacts[12] have echoed calls for increased college completion and supported the development of policy and institutional practices toward that end.[13] Finally, several national foundations have presented their own college completion agendas, and partnerships between foundations are becoming more common as a way to pool resources and maximize impact, a fact suggested by several recently announced initiatives, for example, CEOs for Cities' *Talent Dividend Prize*.[14]

Collectively, the actions of federal and state policymakers and the philanthropic community have made increasing postsecondary attainment a critical national priority. Yet as college completion has taken a central role in economic and political discourse, demographic and residential patterns are changing for whom and where the completion challenge is most critical.

Changing National Demographics

A new demographic profile of the nation is emerging. The United States is becoming larger, more diverse, and more metropolitan. The United States has 309 million people, and the nation's population is projected to grow by 32 million over the coming decade, surpassing 340 million.[15] Today, one-third of the population is non-White, and more than one-half of the nation's population is projected to be non-White by 2050.[16] Additionally, an increasing percentage of the nation's population resides in metropolitan areas, comprising core cities and surrounding suburban and exurban spaces—otherwise known as metropolitan statistical areas [MSAs] **(SEE BOX 1 FOR EXAMPLE).** Basic descriptive statistics of the MSAs used in analysis are reported in **TABLE 1** with additional characteristics shown in **APPENDIX A.** In all, 267 MSAs, representing four out of every five Americans or nearly one-quarter billion individuals, are used in the analysis.

This shift to MSAs moves the focus away from the conventional state-based approach to college completion activities. Although state-based framing is appropriate in many instances, relying on it runs the risk of overlooking critical variations in demographic, economic, and postsecondary educational conditions within states that impact efforts to address educational need.

[7] Metropolitan Policy Program. 2010. *State of Metropolitan America.* The Brookings Institution: Washington, D.C.

[8] Anthony P. Carnevale, et al. 2010. *Help Wanted: Projections of Job and Education Requirements Through 2018.* Washington, D.C.: Georgetown University Center on Education and the Workforce.

[9] "Making College More Affordable." Overview of the Health Care and Education Reconciliation Act, retrieved from http://www.whitehouse.gov/issues/education/higher-education.

[10] Ibid.

[11] National Governors Association, *Complete to Compete.* 2010. For a discussion of the common-data metrics states are encouraged to develop as part of the *Complete to Compete* initiative, see Ryan Reyna, *Complete to Compete: Common College Completion Metrics* (National Governors Association, June 2010).

[12] The four regional compacts are: Midwestern Higher Education Compact; the New England Board of Higher Education; Southern Regional Education Board; Western Interstate Commission for Higher Education.

[13] Doug Lederman. "The Role of the Regions." *InsideHigherEd.* July 16, 2010.

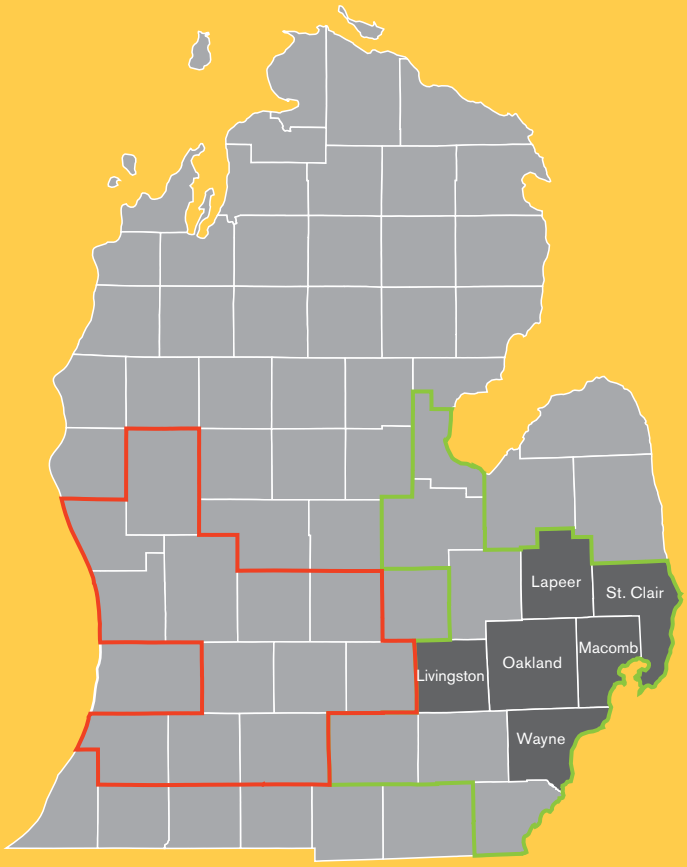
[14] See http://www.ceosforcities.org/TalentDividendPrize for additional information.

[15] Population Division, U.S. Census Bureau. 2011. Table 1-Projections of the Population and Components of Change for the United States: 2010 to 2050.

[16] Ibid.

BOX 1

Focusing on MSAs and
Regional Economies, Michigan



Based on data gathered by the Census Bureau, the U.S. Office of Management and Budget defines Metropolitan Statistical Areas (MSAs) as areas associated with at least one urbanized area that has a population of at least 50,000. MSAs comprise a central county or counties containing the core, urbanized center plus adjacent outlying counties having a high degree of social and economic integration with the central county or counties as measured through commuting. For illustrative purposes, the "mitten" portion of Michigan is shown below.

The darkened area in the southeast portion of the state is the Detroit–Warren–Livonia MSA, which has Detroit (Wayne County) as the core city and St. Clair, Lapeer, Macomb, Oakland, and Livingston counties as outlying but interdependent counties. The Detroit-Warren-Livonia MSA is itself contained in a larger cluster of MSAs that have similar characteristics (outlined in green). They include: Ann Arbor, Detroit-Warren-Livonia, and Jackson. Thus, while in many cases MSAs are used as the primary unit, there are several instances where MSA clusters or regional economies make sense. Adjacent to the Detroit regional economic cluster is one composed of similar MSAs, shown in red. They include: Grand Rapids-Wyoming, Kalamazoo-Portage, and Lansing-East Lansing. Both examples of regional economies highlight the importance of "space" and why most states have far too much variation within their borders to serve as a primary lens through which philanthropy views strategic initiatives to support postsecondary completion.

TABLE 1

Selected Descriptive Statistics of MSAs, 2000 and 2009

	2000		2009	
	Overall	MSA	Overall	MSA
Total population (in millions)	281.0	224.0	307.0	249.5
MSA population as a percent of total population		79.7%		81.1%
Black population	34.7	29.7	38.1	33.0
Black MSA population as a percent of Black population		85.6%		86.6%
Latino population	35.3	32.0	48.4	43.6
Latino MSA population as a percent of Latino population		90.7%		90.1%
"Other" population [a]	35.3	31.5	39.0	32.8
"Other" MSA population as a percent of "other" population [a]		89.2%		84.1%
White population	195.0	147.0	199.0	150.0
White MSA population as a percent of White population		75.4%		75.4%

Source: ACS 2000 and 2009. Authors' calculations.
[a] "Other" includes: American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, Some Other Race, and Two or More Races.

Metropolitan areas are particularly relevant to national college degree attainment goals for at least two reasons. First, metropolitan areas are drivers of economic activity, so it is vital to the national interest that labor pools in the nation's metro-based economic clusters be adequately educated and trained to meet the demands of employers; future productivity demands it. For instance, the 100 most populous metropolitan regions accounted for nearly three-quarters of total gross domestic product in 2008.[17] In addition, metropolitan areas are responsible for producing and supporting the overwhelming majority of knowledge economy jobs, venture capital investments, and patents issued—all of which are key indicators of economic innovation.[18]

Second, most new access and success initiatives are aimed at underserved populations, such as those from low-income or first-generation families, racial/ethnic minorities, and displaced workers. Attempts to erase disturbing gaps in degree attainment of racial and ethnic groups rely on pathways into and through postsecondary education that pay heed to residential patterns. In the case of minority racial and ethnic groups, the overwhelming majority reside in the nation's metropolitan areas.[19]

The nation is becoming increasingly diverse and clustered in metropolitan spaces that are driving cultural and economic innovation. Therefore, efforts to increase degree completion must focus on these critical areas of the national landscape. To assess where areas of educational need are concentrated, and to distill the socioeconomic conditions that underpin this need, this analysis focuses on MSAs.

[17] Bureau of Economic Analysis, U.S. Department of Commerce. 2008. Authors' calculation.
[18] Alan Berube. 2007. *Metro Nation: How U.S. Metropolitan Areas Drive American Prosperity.* The Brookings Institution: Washington, D.C.
[19] Metropolitan Policy Program. 2010. *State of Metropolitan America.* The Brookings Institution: Washington, D.C.

DATA AND DEFINITIONS

The empirical analysis in this report is largely based on MSA-level data taken from the 2000 and 2009 American Community Survey (ACS), an annual survey conducted by the U.S. Census Bureau; this is the most current national data available. State-level data on legislative unity were taken from the National Council for State Legislatures; institutional-level information was drawn from the National Center for Education Statistics' Integrated Postsecondary Education Data System (IPEDS).

Using the conceptual framework shown in **FIGURE 4**, the data elements were selected to reflect the multiple aspects of empirical-based philanthropic decision-making. Four layers explain and predict educational need at the MSA level. The first two layers capture the demographic and economic conditions and, in some cases, constraints that postsecondary institutions and governmental agencies must operate under. The last two layers contain characteristics that further describe the postsecondary landscape in these spaces. Definitions of the layers are provided below; descriptive statistics of the dimensions are shown in **TABLE 2**.

FIGURE 4

Conceptual Framework

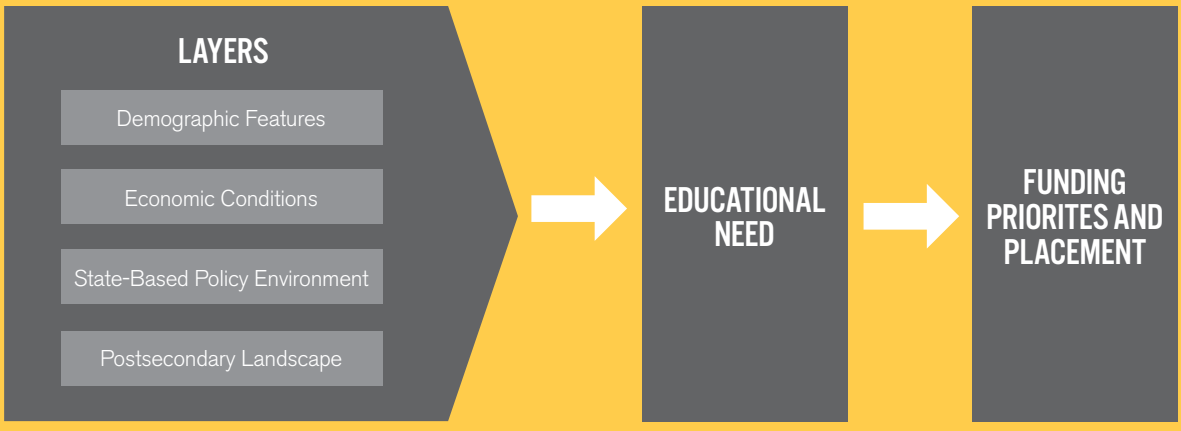


TABLE 2

Descriptive Statistics of MSAs, 2009

	Total
Educational Need	
Percent degree attainment rate	43.7%
Change in percent degree attainment rate since 2000	3.1%
Degrees needed to reach 60 percent attainment	22,739,000
Demographic Features	
Total population	249,500,000
Percent Black, aged 25+	12.2%
Change in percent Black aged 25+ since 2000	0.4%
Percent Latino, aged 25+	14.7%
Change in percent Latino aged 25+ since 2000	2.7%
Percent other, aged 25+ [a]	11.7%
Change in percent other aged 25+ since 2000 [a]	-0.2%
Percent under 18 years old	24.5%
Change in percent under 18 years old	-1.4%
Economic Conditions	
Percent employed in service occupations	31.6%
Change in percent employed in service occupations since 2000	-1.1%
Percent employed in manufacturing occupations	10.0%
Change in percent employed in manufacturing occupations since 2000	-3.0%
Percent employed in education, health, and technology (EHT) occupations	43.6%
Change in percent employed in EHT occupations since 2000	3.4%
Unemployment rate	9.3%
Overall median household income	$53,333
Black median household income	$35,953
Latino median household income	$41,446
Black-White poverty gap	13.0%
Change in Black-White poverty gap since 2000	-0.3%
Latino-White poverty gap	12.0%
Change in Latino-White poverty gap since 2000	-0.3%
Other-White poverty gap [a]	8.2%
Change in other-White poverty gap since 2000 [a]	-2.3%
Policy Environment	
Unity between upper and lower state chambers (2008)	70.4%
Unity between upper and lower state chambers (2000)	61.9%
State legislative unity (2000 to 2008)	47.8%
Number of MSAs	267
MSA is multistate	14.1%
Postsecondary Landscape	
Flagship university is located in MSA	15.9%
Average number of public two-years located in MSA	2.4
Average number of public four-years located in MSA	1.7
Average number of other two- and four-year institutions located in MSA [b]	7.8

Source: ACS 2000 and 2009; IPEDS 2009; National Council for State Legislatures 2009. Author's calculations.

[a] Other race category includes: American Indian and Alaska Native, Asian, Hawaiian and Pacific Islander, Some Other Race, and Two or More Races.

[b] Other institution category includes: private not-for-profit four-year or above, private for-profit four-year or above, private not-for-profit two-year, and private for-profit two-year.

Educational Need

The educational need layer captures two distinct aspects of degree attainment: (1) The aggregate college degree attainment rate of "college eligible" adults in 2009 and (2) the percentage point change in this rate since 2000. Five mutually exclusive categories of educational attainment are used to calculate the attainment rate:

1 High school degree or equivalent
2 Some college, no degree
3 Associate's degree
4 Bachelor's degree
5 Graduate degree

For purposes of this analysis, adults who dropped out of high school before attaining a diploma or equivalent are not considered college eligible and are not included in any of our calculations. After defining the categories and excluding high school dropouts, degree attainment rates were calculated as the percentage of adults with a college degree.

Overall, the degree attainment rate among college eligible adults in metropolitan areas was 44 percent. Stated differently, reaching 60 percent attainment within metro spaces will require 22.7 million additional postsecondary degrees among the college-eligible population. Degree attainment rates for MSAs, in general, range from 24 to 58 percent **(SEE APPENDIX B).**

A single measure of educational need ignores the large variance in progress that each metropolitan area made toward national completion goals in the past decade. Thus, this analysis considers another aspect of attainment, i.e., the extent of inertia. Inertia is defined as the percentage change in degree attainment between 2000 and 2009. This unique measure of educational need captures the inertia each metropolitan area must overcome in order to raise degree attainment rates. Eighty-seven percent of MSAs experienced an increase in their degree attainment rate, but the overall percentage change has been modest—3.1 percentage points over nine years.

Demographic Features

Understanding both the potential consumers of postsecondary education and their location is essential to increasing attainment rates. To this end, the demographic features layer describes characteristics of the individuals who reside in metropolitan areas. Population data from the ACS data files were divided into youth (under 18 years old) and adult (age 25 and older) categories. The adult population was then split into eight race categories: (1) White; (2) Black; (3) Hispanic or Latino; (4) American Indian and Alaska Native; (5) Asian; (6) Native Hawaiian and Other Pacific Islander; (7) Some Other Race; and (8) Two or More Races. After aggregating the last five of these categories and designating them as "other," four race categories emerge: (1) White, (2) Black, (3) Latino, and (4) Other. The age and race categories were used to calculate percent population by age and percent population by race.

As mentioned previously, over the past several decades, the nation has become increasingly diverse and clustered in metropolitan spaces. As of 2009, 81 percent of the nation's population lived in the metropolitan areas used in this analysis. The majority of the nation's Black and Latino population reside in metropolitan areas—87 percent and 90 percent, respectively—with minority adult population as a percentage of total adult population varying significantly by metropolitan area. In the average metropolitan area, Blacks account for 12 percent of the adult population and Latinos account for 15 percent. Demographic shifts over the past decade, calculated as the change in percent population from 2000 to 2009, tell a similar story. As a percent of total population, the Black adult population increased by 0.4 percentage points from 2000 to 2009 in the average metropolitan area, and the Latino adult population increased by slightly under 3 percentage points in the average metropolitan area.

While the characteristics of the adult population describe the current potential consumers of postsecondary education, it is also important to examine future consumers. To this end, the percent of the population under 18, a key variable in the demographic features layer, illuminates areas with significant numbers of future postsecondary education

consumers. As of 2009, nearly 25 percent of the average metropolitan area was under the age of 18. Demographic shifts over the past decade, calculated as the change in percent of the population under 18 from 2000 to 2009, show the aging of the population. In the average metropolitan area, the percent of the population under 18 decreased by 1.4 percentage points from 2000 to 2009.

Economic Conditions

This layer contains the most data elements, which describe in detail key economic indicators that create a complete economic profile of each metropolitan area. Approaching national completion goals through an economic lens illuminates both the adult population most in need of postsecondary training and the metropolitan economies most in need of workers with high-quality degrees.

Current data on employment combined with employment trends over the past decade form the first set of economic indicators. Employment by industry from the ACS data files was sorted into three categories: (1) Employment in service occupations;[20] (2) employment in manufacturing occupations; and (3) employment in education, health, and technology (EHT) occupations.[21] After defining the categories, employment rates by industry were calculated as the percentage of employed adults working in each industry. In order to capture employment trends over the past decade, the percentage changes from 2000 to 2009 in employment rates by industry were calculated.

Overall, nearly one-third of employed adults work in service occupations in the average metropolitan area—a decrease of 1.1 percentage points over the past decade. In the average metropolitan area, 10 percent of employed adults work in manufacturing occupations—a decrease of 3 percentage points from 2000 to 2009. The significant decrease in employment in service and manufacturing occupations from 2000 to 2009—and resulting job loss in these areas—indicate that the adult population will benefit from additional worker training and increased postsecondary opportunities. From 2000 to 2009 the percentage of workers employed in high-skill, EHT occupations increased in nearly all MSAs. For example, in the average metropolitan area, nearly 44 percent of employed adults work in EHT occupations—an increase of 3.4 percentage points over the past decade. Expanding both worker training and postsecondary opportunities in areas with EHT jobs will not only meet employer demand for high-skilled workers, but also increase degree attainment rates—a win for both individuals and metropolitan economies.

The second set of economic indicators, comprising median household income data and poverty gap data, captures the economic conditions for specific racial and ethnic groups. Median household income for three subgroups—all households, Black households, and Latino households—was extracted from the ACS data files. While all three types of median household income vary considerably by MSA, one thing remains consistent across the nation: Median household income for both Blacks and Latinos lags behind overall median household income.

To further explore the economic conditions for specific racial and ethnic groups, the Black-White poverty gap was calculated as the difference between the percentage of Blacks in poverty and the percentage of Whites in poverty; the Latino-White poverty gap was calculated using the percentage of Latinos in poverty. Additionally, to capture how economic inequality changed over time, the percentage change in the poverty gap from 2000 to 2009 was calculated. In the average metropolitan area, the percentage of Blacks in poverty is 13 percentage points higher than the percentage of Whites in poverty. Similarly, the percentage of Latinos in poverty is 12 percentage points higher than the percentage of Whites in poverty in the average metropolitan area. Examining only the current poverty gaps in these metropolitan areas masks important changes in poverty gaps from 2000 to 2009. While in the average MSA the Black-White poverty gap and Latino-White poverty gap remained the same in 2000 and 2009,

[20] Service occupations include construction, wholesale trade, retail trade, transportation and warehousing, and accommodation and food service.

[21] Education, health, and technology occupations include information; professional, scientific, and technical services; management of companies and enterprises; administrative and waste services; educational services; health care and social assistance; arts, entertainment, and recreation; and other services, except public administration.

considerable variation can be seen in individual MSAs. In areas with widening poverty gaps, Blacks and Latinos lag noticeably behind Whites in terms of economic success, which suggests that additional worker training opportunities may be needed to improve depressed economic conditions.

State-Based Policy Environment

The third layer, the state-based policy environment, captures geographically based political conditions that influence policy agendas and policy adoption for higher education. This layer provides both a qualitative and quantitative assessment of the likely political receptiveness to varying policy ideas and foundation priorities. A greater understanding of political conditions can inform which foundation-funded initiatives are more likely to gain traction and, ultimately, succeed. State legislative unity captures the ease of policy formulation, adoption, and implementation. A unified legislature, defined as single party control of both the upper and lower state chambers, enhances the likelihood of cooperation in policymaking and signals a political environment where initiatives are more likely to gain traction. Using state legislature data from the National Council for State Legislatures, each metropolitan area was placed into one of two categories: (1) Unified legislature and (2) split legislature. Multistate metropolitan areas, defined as metropolitan areas comprising counties in two or more states, were categorized as unified only if all of their states had unified legislatures. Metropolitan areas in Nebraska were categorized as split because of the state's unicameral structure. The percentage of metropolitan areas in states with a unified legislature went from 62 percent in 2000 to 70 percent in 2009.[22]

Postsecondary Landscape

The first three layers of the conceptual framework describe the individuals who reside in metropolitan areas and how these individual characteristics, aggregated to the MSA level, can be used to advance the national degree attainment agenda. Shifting the focus from individuals to institutions, the postsecondary environment layer examines the density of different types of postsecondary institutions in each metropolitan area in order to assess postsecondary opportunity in these spaces.

Using institutional characteristics extracted from the National Center for Education Statistics' Integrated Postsecondary Education Data System (IPEDS), each degree-granting institution was placed into one of the following categories: public two-year; public four-year; and "other."[23] After assigning each institution to the MSA in which it is located, the total number of institutions in each MSA by type was calculated. Overall, an average metropolitan area is home to two public two-year institutions, two public four-year institutions, and eight other institutions. In areas with fewer institutions, interventions designed to increase college opportunities may be the most effective way to increase degree completion.

The postsecondary environment profile would be incomplete without the examination of an important subgroup of public four-year institutions—flagship universities. Defined as a state's leading public research-intensive university, and typically the oldest, largest, and most prestigious in the state, flagship universities serve a number of important functions. In addition to serving students and providing other institutions with examples of access and success initiatives, flagships have a vested interest in their local communities. Flagships enroll and graduate in-state and in-region students, with the hope that these educated adults remain in the local communities, strengthen the local economy, and enrich the communities' college-going culture. Flagship universities are located in nearly 16 percent of MSAs. Interventions designed to increase outreach efforts of flagship universities into local communities can increase degree-attainment rates in areas with these types of institutions.

[22] While not the most current data available, state legislature data from 2009 were selected for their compatibility with 2009 ACS data.

[23] The "other" category comprises the following types of institutions: Private not-for-profit four-year or above; private for-profit four-year or above; private not-for-profit two-year; and private for-profit two-year.

THE QUADRANTS EXPLAINED

Supported by the conceptual framework and reflecting the metropolitan lens, the empirical analysis led to the development of four action zones or *quadrants*. The quadrants capture two distinct dimensions: (1) Current educational need, as measured by the percentage of adults with a college degree in 2009; (2) and extent of inertia, as measured by the change in attainment rate from 2000 to 2009. MSAs' placement in a given quadrant and how this placement informs philanthropic efforts are discussed below.

Two models were developed to separately predict MSAs' existing attainment rate and change since 2000 after controlling for a number of key characteristics **(SEE APPENDIX C).** Predicted values of need and inertia from each model were then calculated. Performance—either better-than-expected or lower-than-expected—was assessed by subtracting the actual 2009 attainment rates and change since 2000 from the predicted percentages. The size and direction (positive or negative) of this difference allows a particular MSA to be sited in one of the four quadrants: *Targeted Programs, Capacity Building, Large-Scale Investment,* and *Workforce Development.*

FIGURE 5

Quadrants, Representing Educational Need and Extent of Inertia

Quadrant	Attainment in 2009	Change Since 2000
Targeted Programs	Better than expected	Better than expected
Capacity Building	Better than expected	Less than expected
Large-Scale Investment	Less than expected	Less than expected
Workforce Development	Less than expected	Better than expected

MSAs with better-than-expected attainment rates in 2009 are found in one of the two rightmost quadrants **(SEE FIGURE 5).** Conversely, MSAs that do not perform to the level of attainment predicted by the model fill in the two leftmost quadrants. In terms of change in attainment from 2000 to 2009, the MSAs that exceed expectations are placed in the top quadrants and those that did not meet expectations are in the bottom half.

As a result of the analysis, 22 percent of the 267 MSAs are placed in the *Targeted Programs* quadrant, 16 percent in the *Capacity Building* quadrant, 36 percent in the *Large-Scale Investment* quadrant, and 26 percent in the *Workforce Development* quadrant. Outlining each metropolitan area with color corresponding to the quadrant in which it is placed visually displays the cross-country distribution of MSAs in each quadrant **(SEE FIGURE 6).** Focusing on the quadrants and their metropolitan areas on a national scale ignores significant commonalities within regions; for example, MSAs located in the Midwest share similar regional assets that can be leveraged in unique and effective ways. Further examination by region places MSA performance in the context of existing regional resources and collaboration. To this end, the nation is divided into four regions—Northeast, Midwest, South, and West—and the quadrants are described both in general and by region.[24]

Each quadrant neatly captures the local demographic, economic, and policy contexts of MSAs, and also offers some insight into the type of intervention that would be most appropriate for that area. However, the element of time—how long an intervention would need to be supported in order to observe appreciable gains in the desired outcome—is not as neatly prescribed by the quadrants. For this, further examination by region is needed.

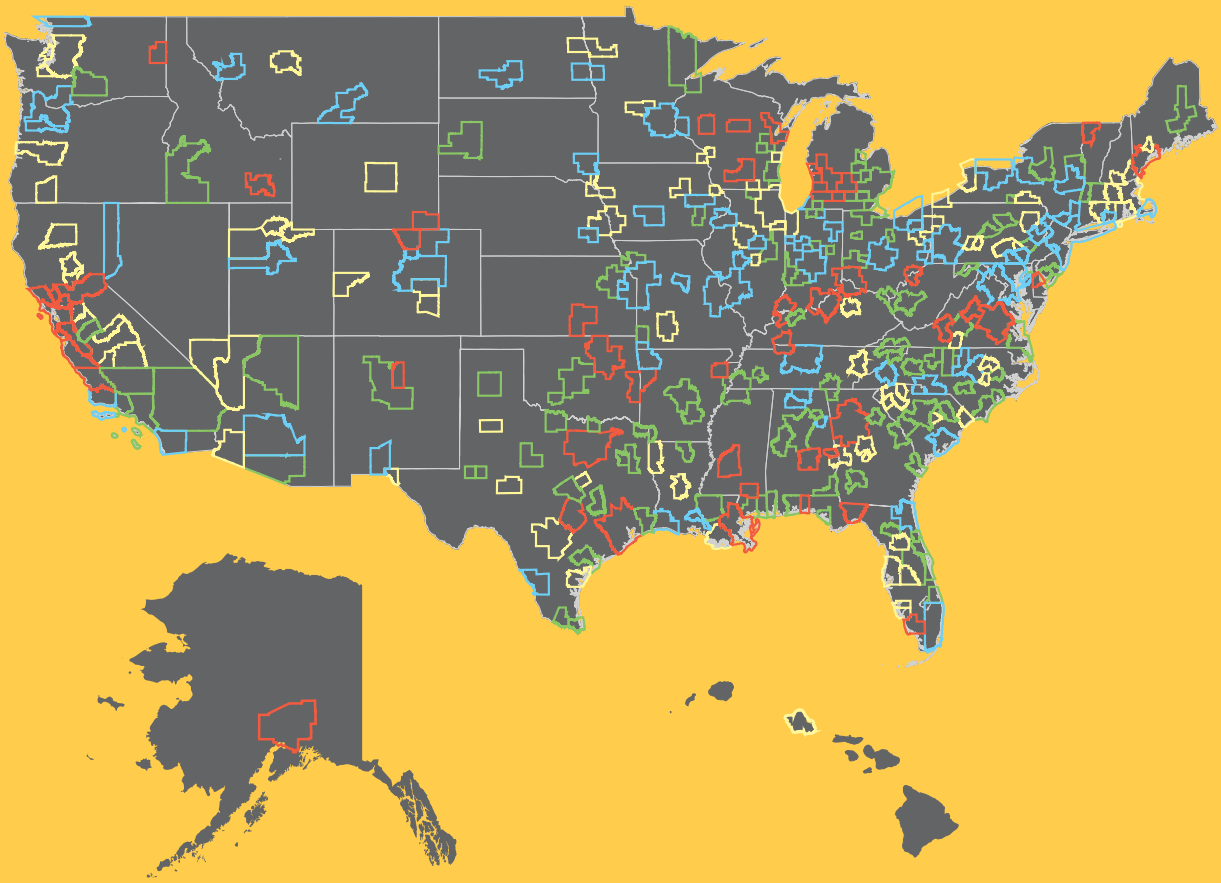
The four regions vary considerably in their demographic makeup, economic mix, and policy milieu. In other words, what may yield immediate gains in degree attainment in one region may require more time in another. Thus, to account for these regional differences, two types of programs within each region are highlighted—one that focuses on potential gains in the short term (between five to eight years) and one that will require a more lengthy commitment (at least 10 years or more). In addition to a description of each quadrant, a profile of the "ideal" intervention that would fit the needs of the MSA is provided below with examples of existing interventions that could serve as models for future funding opportunities offered in **APPENDIX D.**[25]

[24] These regions are based on the following regional higher education compacts: New England Board of Higher Education, Midwestern Higher Education Compact, Southern Regional Education Board, and Western Interstate Commission for Higher Education. The states in the Northeast region include: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. The states in the Midwest region include: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, Ohio, and Wisconsin. The states in the South region include: Alabama, Arkansas, Delaware, the District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. The states of the West region include: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming.

[25] Inclusion of these existing programs does not represent an endorsement by either the Kresge Foundation or the Institute for Higher Education Policy.

FIGURE 6

National Map
of Quadrants



Quadrant	Color	Attainment in 2009	Change Since 2000
Targeted Programs	*Blue*	Better than expected	Better than expected
Capacity Building	*Red*	Better than expected	Less than expected
Large-Scale Investment	*Green*	Less than expected	Less than expected
Workforce Development	*Yellow*	Less than expected	Better than expected

SHORT-TERM PROJECTS

As noted above, short-term projects require five to eight years before meaningful improvements in degree attainment will be observed. As described below, the *Targeted Programs* and *Capacity Building* quadrants have characteristics that suggest instant and lasting success.

TARGETED PROGRAMS

The MSAs in this quadrant have several educational and economic advantages that explain why, on average, they have the highest degree attainment rate—nearly 47 percent—and the largest increase in this rate from the start of the decade, 4.2 percent, compared with the MSAs in the other quadrants. First, they contain two very large MSAs that positively influence the overall degree attainment rate and the number of degrees needed to reach 60 percent—New York City and Washington, D.C. Also, the MSAs in these spaces have more postsecondary institutions than any other quadrant; of the 59 MSAs that compose this quadrant, one in five are home to a flagship four-year university. They also have the highest median household income and lowest unemployment rate of any of the other three quadrants. However, due to their aggregate size (84.2 million in population and 55.7 million without New York City and Washington, D.C.), the number of degrees needed to reach 60 percent attainment in these MSAs is still a heady 6.4 million, which drops to less than 5 million once New York City and Washington, D.C., are omitted. Excluding New York City and Washington, D.C., due to their sheer size, even small interventions can close this gap if they are replicated in multiple places because conditions are most favorable. Based on the analysis, *Targeted Programs* would be most beneficial to MSAs in the Midwest and Northeast.

TARGETED PROGRAMS AT-A-GLANCE

- Forty-seven percent attainment in 2009, an increase of 4.2 percentage points since 2000
- One in five are home to a state flagship university
- Poverty rates of Blacks and Latinos are growing relative to Whites
- 6.4 million degrees needed to reach 60 percent attainment

This quadrant contains some of the largest MSAs in the nation: New York; Washington, D.C.; Miami; and Phoenix, but also a number of college-rich, mid-size MSAs, such as Allentown, Pa.; Syracuse, N.Y.; and Davenport, Iowa.

FIGURE 7

Targeted Programs
in the Midwest Region

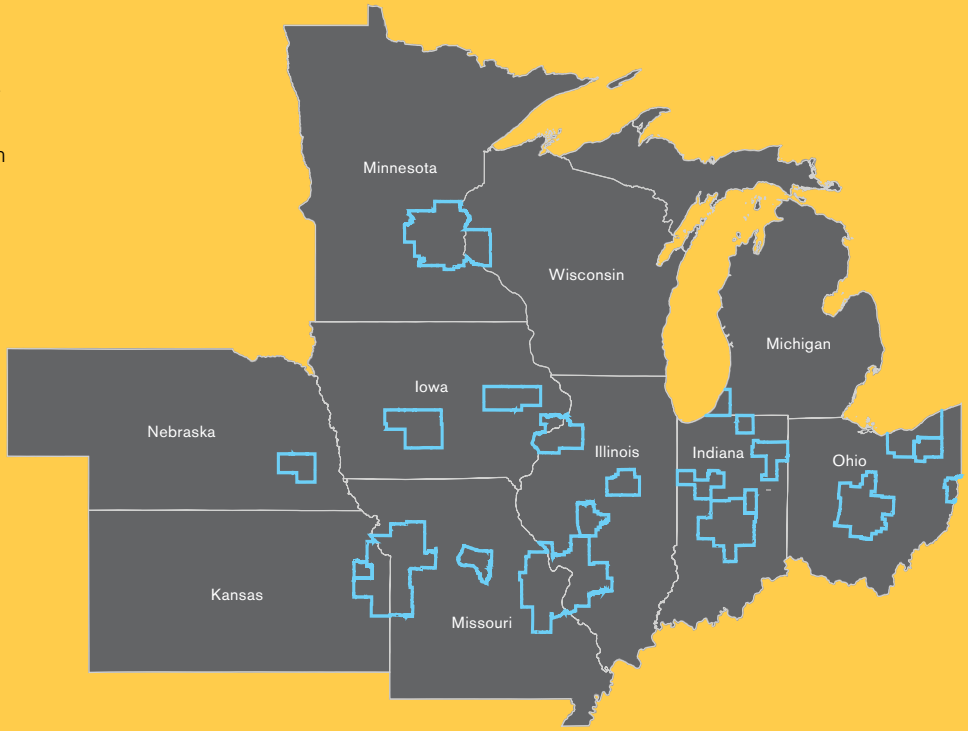
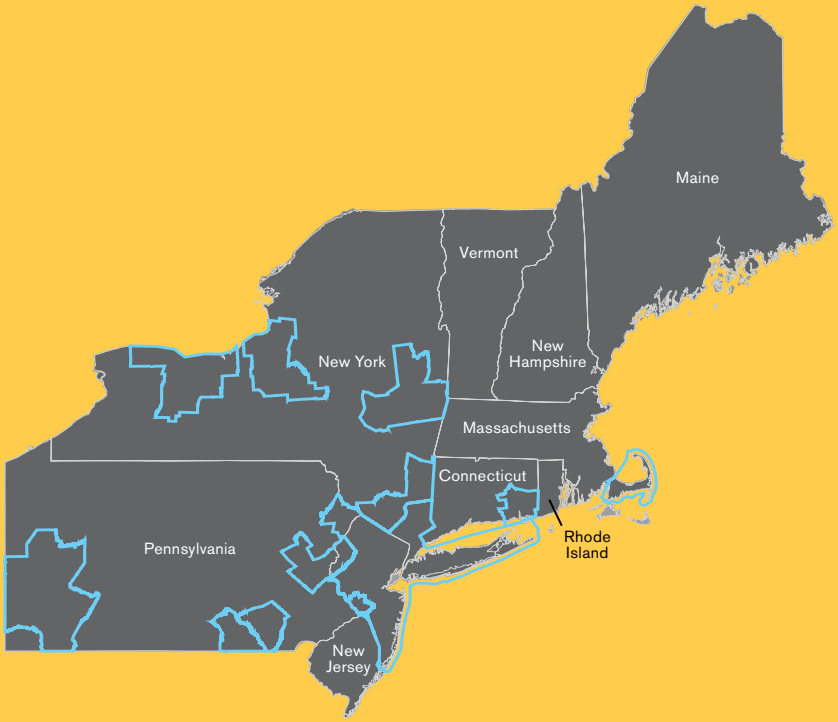


FIGURE 8

Targeted Programs
in the Northeast Region



Targeted Programs in the Midwest Region

The *Targeted Programs* metropolitan areas in the Midwest region increased their degree attainment rate by 4.6 percentage points since 2000, and currently have an attainment rate of 44 percent **(SEE FIGURE 7).** These areas need an additional 1.7 million degrees to reach an overall attainment rate of 60 percent. These areas have an average of 17 postsecondary institutions per MSA—considerably higher than the Midwest, as a whole, and nationally, 12 institutions per MSA. Over 26 percent of these MSAs contain a flagship institution—again, considerably higher than the Midwest and national average of 16 percent.

Given the gap of 1.7 million degrees needed in these *Targeted Programs* regions in the Midwest, interventions replicated in multiple places will help close the completion gap. *Targeted Programs* areas in the Midwest can increase degree attainment rates by leveraging the vested interest that flagship universities have in the success of their local community. More than one in four MSAs are home to a flagship institution, thus interventions at multiple flagships will reach a large share of the Midwest population. In this space, funding to increase outreach efforts of large, public flagship four-year universities into local communities would be most beneficial.

Targeted Programs in the Northeast Region

With New York City and Washington, D.C., omitted, the *Targeted Programs* metropolitan areas in the Northeast region increased their degree attainment rate by 4.3 percentage points since 2000, and currently have an attainment rate of 44 percent **(SEE FIGURE 8).**[26] These areas need an additional 750,000 degrees to reach an overall attainment rate of 60 percent. The *Targeted Programs* MSAs in the Northeast have below average median household income. These areas have an average of 16 postsecondary institutions per MSA (two public two-year, two public four-year, and 12 other institutions), considerably higher than the national average of 12 institutions per MSA.

In these *Targeted Programs* metropolitan areas in the Northeast, interventions replicated in multiple places will help close the completion gap of 750,000 degrees. One unique characteristic of these areas is the large number of postsecondary institutions per *Targeted Programs* MSA. Capitalizing on this unique feature, funding scholarships for students who transfer from two-year institutions and satellite campuses to four-year institutions would be most beneficial in this space.

[26] For the remainder of *"Targeted Programs in the Northeast Region,"* New York City and Washington, D.C., are omitted due to their sheer size and unique environment.

PROFILE OF IDEAL TARGETED PROGRAMS INTERVENTION

Engage leaders at public, four-year institutions to step up existing efforts to increase the enrollment of local high school graduates from disadvantaged backgrounds, as well as transfer students from neighboring community colleges.

CAPACITY BUILDING

Although these MSAs exhibit fairly low education need (their aggregate degree attainment rate of 45 percent is the second highest of the four quadrants and they need the fewest number of degrees among the four to reach an overall attainment rate of 60 percent), the improvement in their degree attainment rate since 2000 has been modest. The most striking feature of this quadrant, however, is the large percentage of individuals 18 years old or younger, so solutions to the emerging capacity challenge are most pressing. Couple this with the fact that public, flagship universities are the least likely to be located in these MSAs compared with those in other quadrants, and the recommendation is clear: Enhance postsecondary educational opportunities through the expansion of infrastructure and instructional offerings at community colleges. According to the model, *Capacity Building* activities are most likely to be successful in southern and western regions.

CAPACITY BUILDING AT-A-GLANCE

- Forty-five percent of the adult population has a college degree, up from 43 percent since 2000
- Under 18-year-old "bubble" is approaching college
- Roughly one in 10 contains a flagship university
- 3.8 million degrees needed to reach 60 percent attainment

A few of the large MSAs in this quadrant are Atlanta, Dallas, Houston, and San Francisco. Examples of mid-size MSAs in this quadrant are Grand Rapids, Mich.; Louisville, Ky.; and New Orleans, La.

Capacity Building in the South Region

The *Capacity Building* metropolitan areas in the South have a high attainment rate of 43 percent, but their degree attainment rate since 2000 has improved only 1.4 percentage points **(SEE FIGURE 9).** These areas need an additional 2.5 million degrees to reach an overall attainment rate of 60 percent.

Nearly 27 percent of the population in these *Capacity Building* metropolitan areas is under the age of 18. The decline in economic footing of Black and Latino adults relative to Whites is also noteworthy. The percentage of Blacks in poverty is 11 percentage points higher than Whites. The percentage of Latinos in poverty is 14 percentage points higher than Whites—a gap that has widened by 2 percentage points since 2000. The gaps between Black and Latino median household income and overall household income—the highest in the South region—are $14,500 and $13,000, respectively. The *Capacity Building* areas in the South, on average, have three public two-year institutions and two public four-year institutions. Only 9 percent of the *Capacity Building* areas contain a flagship university.

In these southern *Capacity Building* metropolitan areas, degree attainment rates cannot be increased without efforts to improve and enhance college opportunity for low-income individuals, in general, and low-income Blacks and Latinos, in particular. Although these *Capacity Building* areas have an above-average number of institutions for the southern region, such a large number of degrees cannot be produced without improving institutional capacity. To this end, grants to community colleges and minority-serving institutions, such as Bowie State University, Coppin State University, and J.F. Drake State Technical College, to improve capacity would be most beneficial in this space.

FIGURE 9

Capacity Building
in the South Region

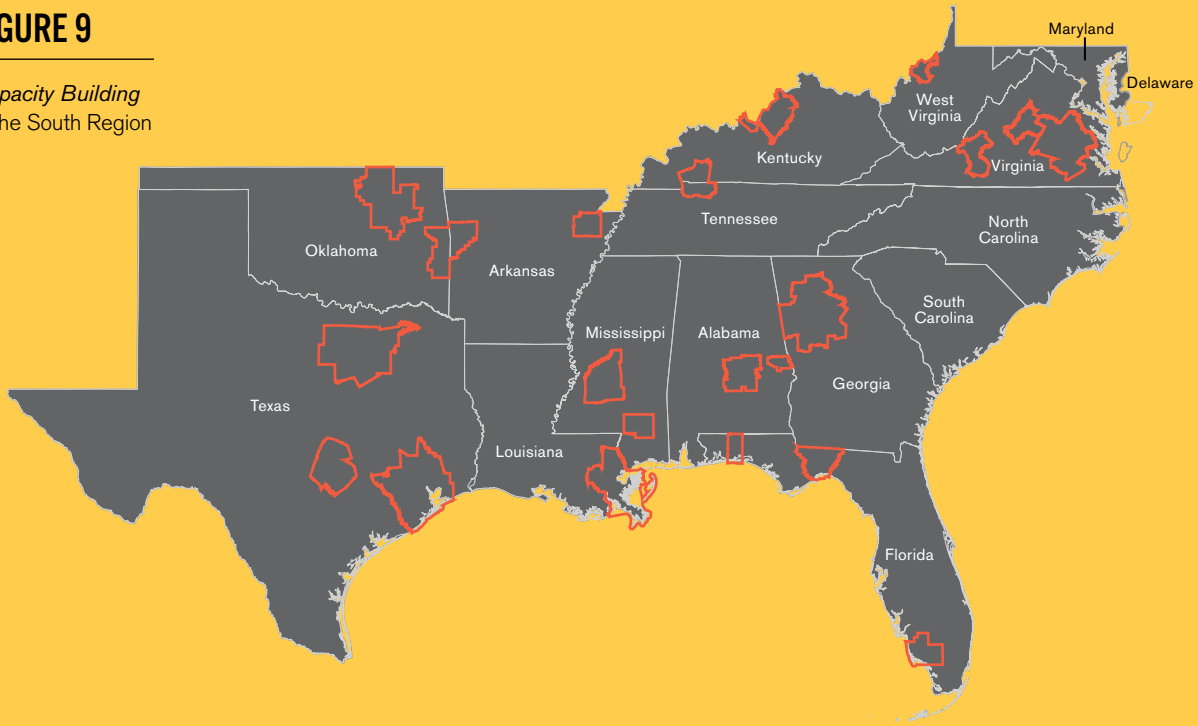
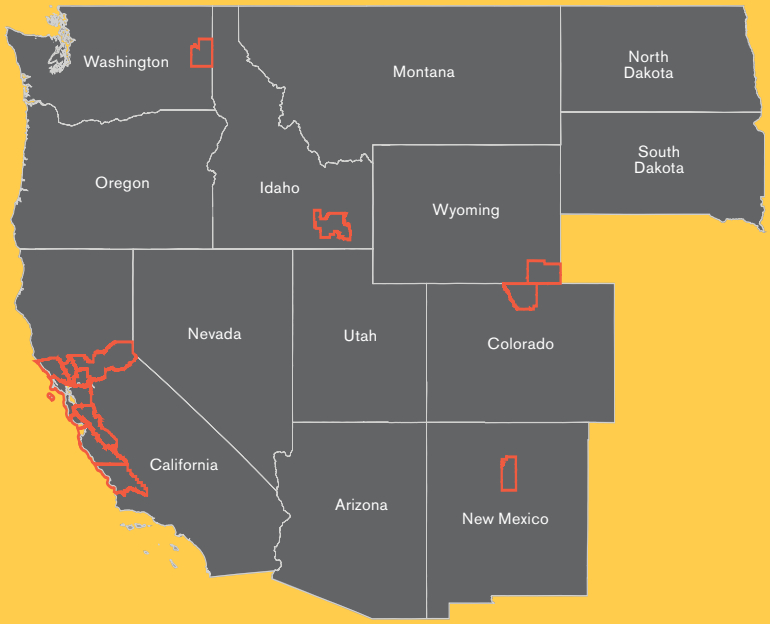


FIGURE 10

Capacity Building
in the West Region



Capacity Building in the West Region

The *Capacity Building* metropolitan areas in the West have a degree attainment rate of 52 percent—an improvement of 3 percentage points since 2000 **(SEE FIGURE 10).** These areas need an additional 525,000 degrees to reach an overall attainment rate of 60 percent.

Over 23 percent of the population in *Capacity Building* metropolitan areas is under the age of 18. The percentage of Blacks in poverty is more than 12 percentage points higher than the percentage of Whites in poverty, reflecting a 2 percentage point increase since 2000. The percentage of Latinos in poverty, in both 2000 and 2009, is 7 percentage points higher than Whites. Contributing to the depressed economic conditions, employment in service and manufacturing occupations since 2000 decreased by 8 percentage points and 3 percentage points, respectively. However, positive economic trends do exist in these *Capacity Building* metropolitan areas: Employment in EHT occupations increased by 4 percentage points since 2000, and this sector currently employs nearly 46 percent of all workers. These areas, on average, are home to only three public two-year institutions and one public four-year institution. Only 10 percent of the *Capacity Building* areas contain a flagship university.

Additional offerings, particularly in the technology field, would best match the needs of *Capacity Building* MSAs in the West. Interventions that also cultivate partnerships with local business and industry to offer apprenticeships are another way of enhancing institutional capacity without necessarily having to build new physical spaces.

PROFILE OF IDEAL CAPACITY BUILDING INTERVENTION

Award grants to community colleges to improve both institutional and instructional capacity through brick-and-mortar and online expansion, as well as incentives to increase the faculty ranks at community colleges and minority-serving institutions.

LONG-TERM PROJECTS

Given their relatively low rates of degree attainment, high levels of inertia, or both, long-term projects, such as those needed in MSAs that fall within the *Large-Scale Investment* and *Workforce Development* quadrants, require at least 10 years of substantial investment before a significant increase in degree attainment will be observed. An additional challenge in *Large-Scale Investment* spaces, which is particularly acute in MSAs in the *Workforce Development* quadrant, is the deep-rooted poverty and income inequality that can hamper attainment efforts.

LARGE-SCALE INVESTMENT

This quadrant, which contains the most MSAs of any of the four, has the lowest overall degree attainment rate, 39.8 percent, and has progressed the slowest over the last decade in improving that rate. Without sufficient numbers of nearby postsecondary institutions—only eight institutions, on average, are located in each MSA in this quadrant—the challenge of adding 7.3 million more degree, 1.4 million from Los Angeles alone, is quite daunting. The MSAs in this quadrant are also, on average, worse off economically than MSAs in other quadrants, which may hamstring efforts to improve college access and success. In many ways, the educational challenges that exist in these MSAs require drastic investments in precollege programs over a number of years, if not generations. *Large-Scale Investment* programs are most needed in the South and Midwest regions.

LARGE-SCALE INVESTMENT AT-A-GLANCE

- Forty percent attainment in 2009 and 38 percent attainment in 2000
- Fewest postsecondary options
- Lowest household income, particularly for Black and Latino households

Although this quadrant contains Detroit, Los Angeles, and Philadelphia, most of the MSAs are small to medium sized, e.g., Beaumont, Texas; Greensboro, N.C.; Milwaukee, Wis.; and Norfolk, Va.

FIGURE 11

Large-Scale Investment in the South Region

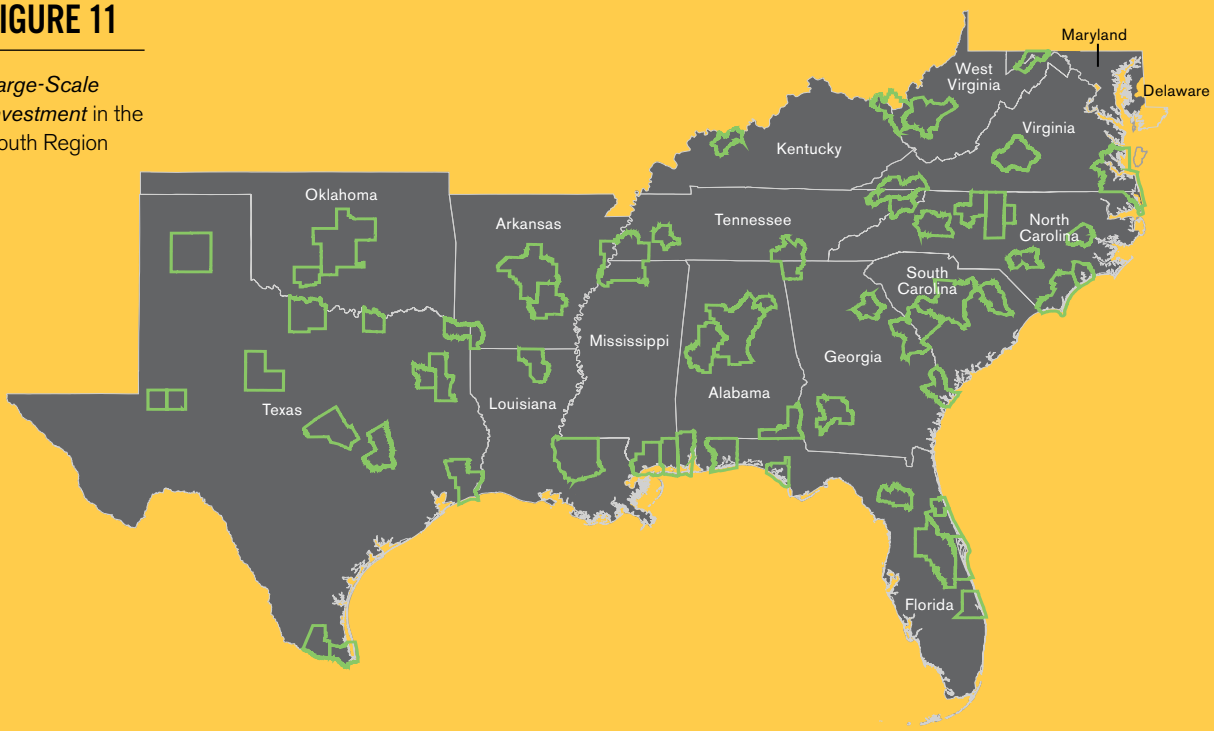
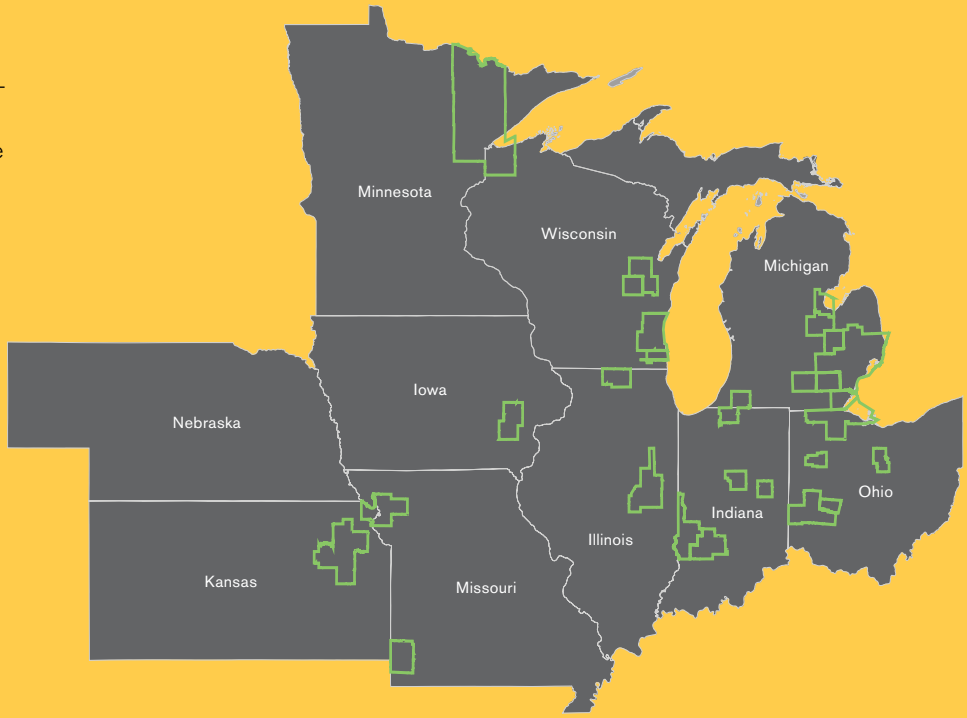


FIGURE 12

Large-Scale Investment in the Midwest Region



Large-Scale Investment in the South Region

The *Large-Scale Investment* metropolitan areas in the South currently have a low attainment rate, 37 percent, and have made little progress from 2000 to 2009—only a 1.4 percentage point increase **(SEE FIGURE 11).** These areas need an additional 3.0 million degrees to reach an overall attainment rate of 60 percent. Worse off economically than the regional and national averages, these *Large-Scale Investment* MSAs in the South have low median household income in all categories (overall, Black, and Latino) and considerable poverty gaps. Demographically, a large share of the adult population is Black (19 percent), and a large share of the overall population is under the age of 18 (25 percent). These areas, on average, are home to only two public two-year institutions, one public four-year institution, and three other institutions.

The educational challenges and demographic characteristics in *Large-Scale Investment* metropolitan areas in the South require drastic investments in precollege programs over a number of years. Given the limited success in increasing attainment in the last decade, the large youth cohort currently enrolled in secondary schooling, and the significant increase in degree production required, innovations in *Large-Scale Investment* metropolitan spaces should center on building college awareness and supporting academic preparation.

Large-Scale Investment in the Midwest Region

The *Large-Scale Investment* metropolitan areas in the Midwest currently have a low attainment rate, 38 percent, and have made little progress from 2000 to 2009, only a 2 percentage point increase **(SEE FIGURE 12).** These areas need an additional 1.5 million degrees to reach an overall attainment rate of 60 percent. Worse off economically than the regional and national averages, these *Large-Scale Investment* MSAs in the Midwest have low median household income in all categories (overall, Black, and Latino) and considerable poverty gaps. The percentage of Blacks in poverty is 20 percentage points greater than the percentage of Whites in poverty, a gap that has widened by over 3 percentage points since 2000. Demographically, a large share of the adult population is Black (13 percent), and a large share of the overall population is under the age of 18 (24 percent). These areas, on average, are home to only two public two-year institutions, one public four-year institution, and four other postsecondary institutions.

The challenges that face *Large-Scale Investment* metropolitan areas in the South are also present in similar MSAs in the Midwest. The best approach to improving degree completion in these areas is a diverse set of precollege initiatives that extend beyond the school day and last throughout the year.

PROFILE OF IDEAL LARGE-SCALE INVESTMENT INTERVENTION

Provide long-term assistance to K–12 school districts to establish and augment a wider range of academic and social supports that reduce school dropout and improve college readiness, such as after-school activities, college preparatory courses, and summer bridge programs.

WORKFORCE DEVELOPMENT

Similar to *Large-Scale Investment* quadrant discussed above, these MSAs have clear educational needs (42.3 percent of adults, on average have a college degree), but unlike MSAs in *Large-Scale Investment* areas, their degree attainment rate has improved substantially since 2000 (3.9 percent). The education-related features of MSAs in this quadrant are on par with the others, but their economic conditions, especially for Blacks, lag noticeably behind. Thus, interventions that link work-based skills to the classroom and then back to the workplace have the best chance of succeeding in these MSAs. The West and Northeast regions would be most receptive to *Workforce Development* initiatives.

WORKFORCE DEVELOPMENT AT-A-GLANCE

- Forty-two percent of adults have a degree, an increase of 4 percentage points since 2000
- Manufacturing occupations continue to dwindle
- Poverty is decreasing among Blacks and Latinos relative to Whites

Boston, Chicago, and Seattle are the most prominent large-city MSAs in this quadrant. Buffalo, N.Y.; Providence, R.I.; and Salt Lake City, Utah, are several of the medium-sized MSAs.

Workforce Development in the West Region

The *Workforce Development* metropolitan areas increased their degree attainment rate by a remarkable 4.0 percentage points since 2000, but the current 41 percent degree attainment rate is still low **(SEE FIGURE 13).** These areas need an additional 1.3 million degrees to reach an overall attainment rate of 60 percent. In these *Workforce Development* metropolitan areas in the West, economic conditions, especially for Blacks, lag noticeably behind. For example, Black median household income is $15,000 less than overall median household income. The percentage of Blacks in poverty is 13.5 percentage points greater than the percentage of Whites in poverty, a gap that has widened by 1.5 percentage points since 2000. In the local labor market, employment in service and manufacturing occupations since 2000 decreased by 1.9 and 1.5 percentage points, respectively.

Interventions that link work-based skills to the classroom and then back to the workplace have the best chance of succeeding in these *Workforce Development* MSAs in the West. Worker training programs designed to teach new skills that can be applied in growth industries will have the greatest impact. Grants encouraging partnerships with dominant local businesses and industries would be most beneficial in this space.

Workforce Development in the Northeast Region

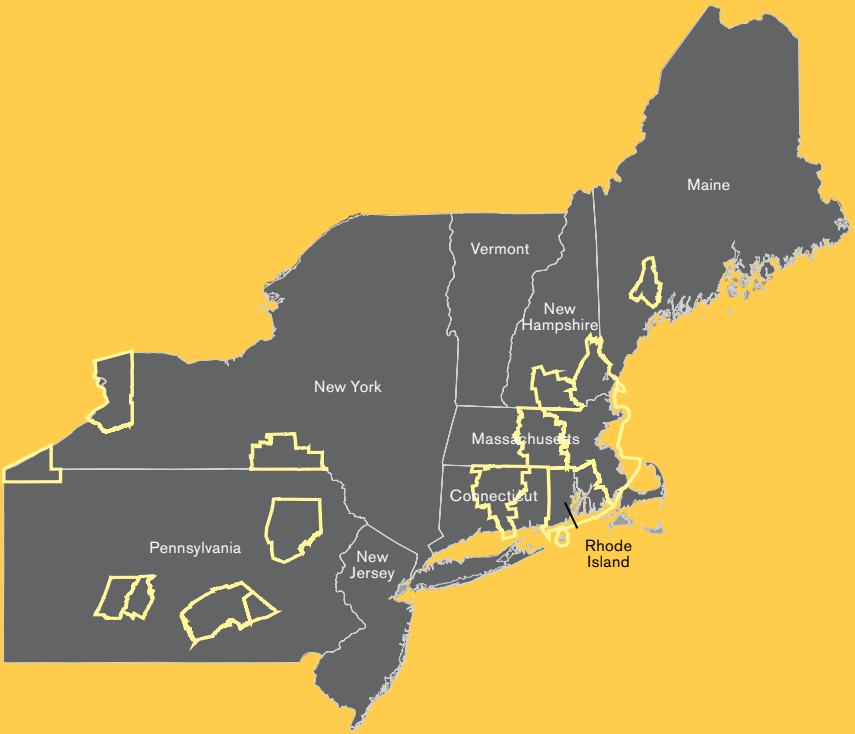
The *Workforce Development* metropolitan areas in the Northeast region increased their degree attainment rate by 4.4 percentage points since 2000; however, their current 48 percent degree attainment rate is lower than expected **(SEE FIGURE 14).** These areas need an addi-

FIGURE 13

Workforce Development
in the West Region

FIGURE 14

Workforce Development
in the Northeast Region



tional 900,000 degrees to reach an overall attainment rate of 60 percent. In these *Workforce Development* metropolitan areas in the Northeast, economic conditions, especially for Blacks and Latinos, lag noticeably behind. For example, Black median household income is $20,000 less than overall median household income. The percentage of Blacks in poverty is 13.4 percentage points greater than the percentage of Whites in poverty. Economic conditions are not much better for Latinos. Overall median household income in the *Workforce Development* MSAs in the Northeast is $25,000 more than Latino median household income, and the Latino-White poverty gap is 17.6 percentage points. In the local labor market, employment in manufacturing occupations since 2000 decreased by 3.9 percentage points, while employment in EHT occupations increased by 5.0 percentage points since 2000.

Interventions that link work-based skills to the classroom and then back to the workplace have the best chance of succeeding in these *Workforce Development* MSAs in the Northeast. Given the employment growth in the EHT sector, worker-training programs that provide recently displaced workers with new skills relevant to EHT occupations will have the greatest impact in this region. Grants focused on adult learners and displaced workers would provide the most benefit in this space.

PROFILE OF IDEAL WORKFORCE DEVELOPMENT INTERVENTION

In partnership with local, private foundations, target key community groups and labor organizations to further develop wrap-around educational, (re)training, and employment services for adult learners and displaced workers.

CONCLUSION

Moving Postsecondary Philanthropy Forward

Over the past decade, expectations about the role of private philanthropy in expanding access to and success in postsecondary education have increased. These expectations are based on assumptions that philanthropic organizations—both national and community foundations—can enhance the capacity and performance of postsecondary institutions. These organizations generously provide direct support for programs and convenings; assist students with financial, academic, and social preparation; and influence the adoption of federal and state policies.

Moving forward, private philanthropy will continue to be critical for assisting students, postsecondary institutions, and communities in reaching articulated national degree attainment goals. To assist leaders of philanthropy in crafting initiatives that are likely to be successful, this report highlights the necessity of addressing educational need in metropolitan areas, and presents unique insights into the types of interventions that are most appropriate given current levels of educational attainment and historic performance. Considering metropolitan areas in this way advances the relevance of placed-based strategies for reaching educational attainment goals, and offers a framework for future strategic decision-making.

APPENDIX A

Selected Descriptive Statistics of MSAs by Quadrant

Key Characteristics of Quadrants	Large-Scale Investment	Workforce Development	Targeted Programs	Capacity Building
Number of MSAs	94	68	57	44
Percent degree attainment rate	37.9%	41.3%	44.6%	45.0%
Change in percent degree attainment rate since 2000	1.8%	3.9%	4.2%	1.9%
Total population	48,743,040	42,015,310	55,654,550	46,510,170
Degrees needed to reach 60 percent attainment	5,964,830	4,366,030	4,957,760	3,820,250
Percent Black, aged 25+	15.4%	6.9%	9.7%	13.5%
Change in percent Black aged 25+ since 2000	0.5%	0.4%	0.4%	0.4%
Percent Latino, aged 25+	9.5%	13.6%	12.2%	14.5%
Change in percent Latino aged 25+ since 2000	1.9%	2.6%	1.9%	3.3%
Percent other, aged 25+ [a]	5.9%	9.8%	6.8%	13.5%
Change in percent other aged 25+ since 2000 [a]	-0.8%	-1.3%	-0.7%	0.1%
Percent under 18 years old	24.2%	24.0%	24.3%	25.3%
Change in percent under 18 years old	-1.5%	-1.4%	-1.3%	-1.0%
Percent employed in service occupations	31.7%	32.2%	32.3%	31.3%
Change in percent employed in service occupations since 2000	-1.2%	-1.6%	-1.3%	-2.2%
Percent employed in manufacturing occupations	11.0%	9.6%	10.2%	10.4%
Change in percent employed in manufacturing occupations since 2000	-3.5%	-2.9%	-2.9%	-2.7%
Percent employed in EHT occupations	43.0%	43.0%	43.1%	42.1%
Change in percent employed in EHT occupations since 2000	4.0%	3.6%	3.8%	2.9%
Unemployment rate	9.7%	9.7%	8.8%	8.8%
Overall median household income	$45,882	$50,935	$51,626	$54,007
Black median household income	$30,577	$35,366	$32,450	$38,461
Latino median household income	$37,372	$38,397	$38,632	$41,485
Black-White poverty gap	14.2%	13.3%	14.2%	12.9%
Change in Black-White poverty gap since 2000	0.0%	-0.3%	0.8%	0.9%
Latino-White poverty gap	12.9%	12.4%	13.0%	12.4%
Change in Latino-White poverty gap since 2000	-0.2%	-0.8%	0.7%	1.6%
Other-White poverty gap [a]	9.3%	8.8%	7.7%	8.0%
Change in other-White poverty gap since 2000 [a]	-2.1%	-2.3%	-2.8%	-1.0%

Selected Descriptive Statistics of MSAs by Quadrant

Key Characteristics of Quadrants	Large-Scale Investment	Workforce Development	Targeted Programs	Capacity Building
Unity between upper and lower state chambers (2008)	70.2%	77.9%	70.2%	61.4%
Unity between upper and lower state chambers (2000)	61.7%	63.2%	63.2%	63.6%
State legislative unity (2000 to 2008)	46.8%	51.5%	49.1%	45.5%
MSA is multistate	11.7%	11.8%	17.5%	13.6%
Flagship university is located in MSA	17.0%	14.7%	17.5%	11.4%
Average number of public two-years	1.6	1.8	2.5	2.3
Average number of public four-years	1.3	1.2	1.7	1.8
Average number of other two- and four-year institutions located in MSA [b]	4.2	5.5	10.9	7.0

Source: ACS 2000 and 2009; IPEDS 2009; National Council for State Legislatures 2009. Author's calculations.

[a] Other race category includes: American Indian and Alaska Native, Asian, Hawaiian and Pacific Islander, Some Other Race, and Two or More Races.

[b] Other institution category includes: Private not-for-profit four-year or above; private for-profit four-year or above; private not-for-profit two-year; and private for-profit two-year.

The descriptive statistics shown above do not include the following large MSAs: Los Angeles-Riverside-Orange County, Calif. [*Large-Scale Investment*]; Washington-Baltimore, D.C.-Md.-Va.-W.V. [*Targeted Program*]; Chicago-Gary-Kenosha, Ill.-Ind.-Wis. [*Workforce Development*]; and New York-Northern New Jersey-Long Island N.Y.-N.J.-Conn.-Pa. [*Targeted Program*]. The degree attainment rates with these large MSAs included are as follows: *Large-Scale Investment*, 39.8 percent; *Workforce Development*, 42.3 percent; and *Targeted Programs*, 46.8 percent. The *Capacity Building* quadrant is unaffected and, for the most part, neither is the change in their respective degree attainment rates since 2000. The percentage point change for *Large-Scale Investment* quadrant was one-tenth of one percent better with the Los Angeles MSA than without. As the population size of the MSA also increases, these four large cities also magnify the quadrant-specific number of degrees needed to reach 60 percent attainment. Including them increases the *Large-Scale Investment* number to 7.3 million, *Workforce Development* to 5.1 million, and *Targeted Program* to 6.4 million.

APPENDIX B

List of MSAs by Quadrant, Region, and Degree Attainment, 2000 and 2009

Targeted Programs

Metropolitan Statistical Area	Region	2000 Attainment	2009 Attainment
Albany—Schenectady—Troy, N.Y.	Northeast	44.6%	49.2%
Allentown—Bethlehem—Easton, Pa.	Northeast	34.8%	39.1%
Anniston, Ala.	South	27.5%	29.6%
Asheville, N.C.	South	38.9%	43.3%
Barnstable—Yarmouth, Mass.	Northeast	46.3%	52.2%
Bellingham, Wash.	West	39.3%	47.6%
Benton Harbor, Mich.	Midwest	33.4%	38.5%
Billings, Mont.	West	36.1%	38.6%
Bismarck, N.D.	West	42.9%	46.5%
Bloomington—Normal, Ill.	Midwest	46.3%	52.3%
Cedar Rapids, Iowa	Midwest	40.8%	43.8%
Charleston—North Charleston, S.C.	South	39.4%	45.1%
Charlotte—Gastonia—Rock Hill, N.C.—S.C.	South	41.2%	47.6%
Cleveland—Akron, Ohio	Midwest	34.9%	38.9%
Columbia, Mo.	Midwest	52.0%	54.4%
Columbus, Ohio	Midwest	40.6%	44.5%
Davenport—Moline—Rock Island, Iowa—Ill.	Midwest	32.5%	38.9%
Decatur, Ala.	South	28.5%	32.2%
Denver—Boulder—Greeley, Colo.	West	48.5%	51.8%
Des Moines, Iowa	Midwest	40.7%	47.5%
Elkhart—Goshen, Ind.	Midwest	26.4%	32.7%
Fargo—Moorhead, N.D.—Minn.	West	43.3%	48.4%
Fayetteville—Springdale—Rogers, Ark.	South	33.1%	35.9%
Fort Wayne, Ind.	Midwest	31.6%	37.6%
Huntsville, Ala.	South	44.1%	47.6%
Indianapolis, Ind.	Midwest	37.9%	42.2%
Jacksonville, Fla.	South	36.4%	40.6%
Kansas City, Mo.—Kansas	Midwest	39.6%	43.7%
Lafayette, Ind.	Midwest	38.7%	44.2%
Lafayette, La.	South	29.4%	36.6%
Lake Charles, La.	South	27.2%	33.1%
Lancaster, Pa.	Northeast	32.3%	35.3%
Laredo, Texas	South	36.1%	40.1%
Las Cruces, N.M.	West	39.5%	43.0%
Lawrence, Kansas	Midwest	51.4%	57.8%

Targeted Programs

Metropolitan Statistical Area	Region	2000 Attainment	2009 Attainment
Lincoln, Neb.	Midwest	45.6%	49.3%
Miami—Fort Lauderdale, Fla.	South	40.2%	43.8%
Minneapolis—St. Paul, Minn.—Wis.	Midwest	45.2%	50.7%
Missoula, Mont.	West	41.4%	48.1%
Nashville, Tenn.	South	39.2%	43.1%
New London—Norwich, Conn.—R.I.	Northeast	38.1%	46.3%
New York—Northern New Jersey—Long Island, N.Y.—N.J.—Conn.—Pa.	Northeast	45.6%	49.9%
Phoenix—Mesa, Ariz.	West	39.0%	41.6%
Pittsburgh, Pa.	Northeast	36.3%	40.2%
Portland—Salem, Ore.—Wash.	West	40.1%	44.8%
Provo—Orem, Utah	West	45.3%	47.5%
Raleigh—Durham—Chapel Hill, N.C.	South	53.8%	56.9%
Reno, N.V.	West	36.6%	39.5%
Rochester, N.Y.	Northeast	44.0%	48.5%
San Diego, Calif.	West	44.9%	49.8%
Santa Barbara—Santa Maria—Lompoc, Calif.	West	46.8%	51.1%
Sioux Falls, S.D.	West	38.3%	43.1%
Springfield, Ill.	Midwest	39.4%	43.0%
St. Louis, Mo.—Ill.	Midwest	37.8%	42.0%
Steubenville—Weirton, Ohio—W.V.	Midwest	22.3%	28.0%
Syracuse, N.Y.	Northeast	40.3%	44.2%
Washington—Baltimore, D.C.—Md.—Va.—W.V.	South	49.7%	53.7%
Wheeling, W.V.—Ohio	South	25.0%	30.4%
York, Pa.	Northeast	29.9%	33.6%

Capacity Building

Metropolitan Statistical Area	Region	2000 Attainment	2009 Attainment
Anchorage, Ark.	West	40.8%	40.2%
Atlanta, Ga.	South	45.0%	46.6%
Auburn—Opelika, Ala.	South	42.4%	44.3%
Austin—San Marcos, Texas	South	49.7%	51.8%
Burlington, Vt.	Northeast	51.8%	52.2%
Charlottesville, Va.	South	53.5%	52.3%
Cheyenne, Wyo.	West	36.6%	37.6%
Cincinnati—Hamilton, Ohio—Ky.—Ind.	Midwest	37.7%	40.5%
Clarksville—Hopkinsville, Tenn.—Ky.	South	29.2%	30.1%
Dallas—Fort Worth, Texas	South	42.5%	44.3%
Dover, Del.	South	31.7%	31.5%
Eau Claire, Wis.	Midwest	36.3%	38.7%
Evansville—Henderson, Ind.—Ky.	Midwest	30.5%	33.2%
Fort Collins—Loveland, Colo.	West	50.6%	52.7%
Fort Smith, Ark.—Okla.	South	26.5%	27.5%
Fort Walton Beach, Fla.	South	37.7%	39.2%

Capacity Building

Metropolitan Statistical Area	Region	2000 Attainment	2009 Attainment
Grand Rapids—Muskegon—Holland, Mich.	Midwest	36.1%	38.7%
Green Bay, Wis.	Midwest	36.3%	37.8%
Hattiesburg, Miss.	South	37.4%	36.8%
Houston—Galveston—Brazoria, Texas	South	41.3%	42.0%
Jackson, Miss.	South	42.5%	42.2%
Jonesboro, Ark.	South	31.7%	30.5%
Kalamazoo—Battle Creek, Mich.	Midwest	36.1%	39.3%
Lansing—East Lansing, Mich.	Midwest	41.2%	43.5%
Louisville, Ky.—Ind.	South	34.4%	36.8%
Madison, Wis.	Midwest	53.8%	54.0%
Montgomery, Ala.	South	37.5%	37.7%
Naples, Fla.	South	41.2%	43.0%
New Orleans, La.	South	34.4%	36.7%
Parkersburg—Marietta, W.V.—Ohio	South	26.3%	27.7%
Pocatello, Idaho	West	36.8%	36.4%
Portland, Maine	Northeast	46.6%	47.5%
Richmond—Petersburg, Va.	South	41.7%	43.5%
Roanoke, Va.	South	36.6%	36.3%
Sacramento—Yolo, Calif.	West	41.8%	44.8%
Salinas, Calif.	West	42.3%	41.6%
San Francisco—Oakland—San Jose, Calif.	West	53.0%	56.5%
San Luis Obispo—Atascadero—Paso Robles, Calif.	West	41.8%	44.5%
Santa Fe, N.M.	West	53.2%	50.6%
Spokane, Wash.	West	39.4%	42.4%
Tallahassee, Fla.	South	51.4%	47.3%
Tulsa, Okla.	South	35.9%	37.5%
Wausau, Wis.	Midwest	32.8%	35.5%
Wichita, Kansas	Midwest	35.2%	36.9%

Large-Scale Investment

Metropolitan Statistical Area	Region	2000 Attainment	2009 Attainment
Abilene, Texas	South	34.4%	33.2%
Albany, Ga.	South	29.9%	30.7%
Albuquerque, N.M.	West	40.9%	42.8%
Amarillo, Texas	South	33.9%	35.4%
Appleton—Oshkosh—Neenah, Wis.	Midwest	34.8%	36.9%
Athens, Ga.	South	47.5%	47.6%
Augusta—Aiken, Ga.—S.C.	South	34.9%	37.0%
Bakersfield, Calif.	West	29.1%	28.6%
Bangor, Maine	Northeast	39.7%	37.2%
Baton Rouge, La.	South	34.0%	35.4%
Beaumont—Port Arthur, Texas	South	25.4%	27.3%
Biloxi—Gulfport—Pascagoula, Miss.	South	31.3%	30.9%
Birmingham, Ala.	South	37.6%	40.0%

Large-Scale Investment

Metropolitan Statistical Area	Region	2000 Attainment	2009 Attainment
Bloomington, Ind.	Midwest	50.3%	42.9%
Boise City, Idaho	West	38.5%	39.6%
Brownsville—Harlingen—San Benito, Texas	South	31.9%	31.6%
Bryan—College Station, Texas	South	51.0%	45.3%
Champaign—Urbana, Ill.	Midwest	49.6%	47.9%
Charleston, W.V.	South	31.5%	31.8%
Chattanooga, Tenn.—Ga.	South	33.0%	36.0%
Columbia, S.C.	South	44.0%	44.1%
Cumberland, Md.—W.V.	South	25.3%	28.2%
Daytona Beach, Fla.	South	31.3%	33.3%
Dayton—Springfield, Ohio	Midwest	34.7%	36.0%
Detroit—Ann Arbor—Flint, Mich.	Midwest	36.7%	39.5%
Dothan, Ala.	South	31.0%	30.0%
Duluth—Superior, Minn.—Wis.	Midwest	33.9%	36.4%
Elmira, N.Y.	Northeast	33.4%	36.7%
Fayetteville, N.C.	South	33.4%	35.0%
Flagstaff, Ariz.—Utah	West	42.2%	39.6%
Florence, S.C.	South	33.8%	34.2%
Fort Pierce—Port St. Lucie, Fla.	South	32.8%	35.2%
Gadsden, Ala.	South	27.2%	26.5%
Gainesville, Fla.	South	54.9%	53.3%
Glens Falls, N.Y.	Northeast	33.7%	34.7%
Greensboro—Winston-Salem—High Point, N.C.	South	37.1%	38.0%
Greenville, N.C.	South	42.5%	43.2%
Hickory—Morganton—Lenoir, N.C.	South	28.7%	31.0%
Huntington—Ashland, W.V.—Ky.—Ohio	South	25.5%	29.9%
Iowa City, Iowa	Midwest	58.8%	56.9%
Jackson, Mich.	Midwest	28.8%	31.4%
Jackson, Tenn.	South	32.2%	35.3%
Jacksonville, N.C.	South	27.1%	28.1%
Johnson City—Kingsport—Bristol, Tenn.—Va.	South	29.7%	29.9%
Joplin, Mo.	Midwest	26.9%	29.1%
Killeen—Temple, Texas	South	31.8%	31.8%
Kokomo, Ind.	Midwest	27.7%	29.9%
Lawton, Okla.	South	29.0%	29.5%
Lima, Ohio	Midwest	25.6%	26.2%
Little Rock—North Little Rock, Ark.	South	35.4%	37.3%
Longview—Marshall, Texas	South	29.2%	30.3%
Los Angeles—Riverside—Orange County, Calif.	West	42.7%	44.8%
Lynchburg, Va.	South	32.7%	35.4%
Mansfield, Ohio	Midwest	22.3%	25.0%
McAllen—Edinburg—Mission, Texas	South	31.3%	33.9%
Melbourne—Titusville—Palm Bay, Fla.	South	37.6%	39.5%
Memphis, Tenn.—Ark.—Miss.	South	35.0%	35.9%

Large-Scale Investment

Metropolitan Statistical Area	Region	2000 Attainment	2009 Attainment
Merced, Calif.	West	28.1%	27.1%
Milwaukee—Racine, Wis.	Midwest	39.2%	42.2%
Mobile, Ala.	South	32.4%	32.3%
Monroe, La.	South	32.5%	32.8%
Muncie, Ind.	Midwest	30.7%	32.2%
Norfolk—Virginia Beach—Newport News, Va.—N.C.	South	36.2%	39.9%
Odessa—Midland, Texas	South	32.8%	31.1%
Oklahoma City, Okla.	South	35.6%	38.6%
Orlando, Fla.	South	39.5%	41.1%
Owensboro, Ky.	South	28.0%	27.5%
Panama City, Fla.	South	31.4%	32.7%
Pensacola, Fla.	South	36.0%	37.0%
Philadelphia—Wilmington—Atlantic City, Pa.—N.J.—Del.—Md.	Northeast	39.8%	43.2%
Pine Bluff, Ark.	South	25.3%	24.0%
Pittsfield, Mass.	Northeast	37.2%	39.1%
Rapid City, S.D.	West	37.5%	37.9%
Reading, Pa.	Northeast	31.0%	32.8%
Rockford, Ill.	Midwest	30.5%	32.7%
Saginaw—Bay City—Midland, Mich.	Midwest	31.1%	30.4%
Savannah, Ga.	South	35.5%	37.5%
Sherman—Denison, Texas	South	31.0%	32.2%
South Bend, Ind.	Midwest	35.7%	35.4%
Springfield, Mass.	Northeast	40.1%	42.3%
St. Joseph, Mo.	Midwest	25.8%	28.4%
State College, Pa.	Northeast	46.6%	50.2%
Terre Haute, Ind.	Midwest	29.7%	31.6%
Texarkana, Texas—Texarkana, Ark.	South	26.0%	27.7%
Toledo, Ohio	Midwest	34.3%	34.4%
Topeka, Kansas	Midwest	34.2%	35.4%
Tucson, Ariz.	West	40.1%	42.0%
Tuscaloosa, Ala.	South	37.4%	33.6%
Tyler, Texas	South	37.3%	38.7%
Utica—Rome, N.Y.	Northeast	34.5%	34.7%
Victoria, Texas	South	29.5%	28.2%
Wichita Falls, Texas	South	31.7%	29.1%
Williamsport, Pa.	Northeast	28.6%	31.1%
Wilmington, N.C.	South	40.0%	43.6%
Yakima, Wash.	West	29.8%	30.7%

Workforce Development

Metropolitan Statistical Area	Region	2000 Attainment	2009 Attainment
Alexandria, La.	South	27.1%	30.7%
Altoona, Pa.	Northeast	23.5%	30.0%

Workforce Development

Metropolitan Statistical Area	Region	2000 Attainment	2009 Attainment
Binghamton, N.Y.	Northeast	38.2%	42.2%
Boston—Worcester—Lawrence, Mass.—NH—Maine—Conn.	Northeast	48.6%	53.3%
Buffalo—Niagara Falls, N.Y.	Northeast	39.5%	43.8%
Canton—Massillon, Ohio	Midwest	27.0%	30.9%
Casper, Wyo.	West	32.9%	40.0%
Chicago—Gary—Kenosha, Ill.—Ind.—Wis.	Midwest	42.6%	46.5%
Chico—Paradise, Calif.	West	36.0%	39.6%
Colorado Springs, Colo.	West	45.1%	48.8%
Columbus, Ga.—Ala.	South	32.2%	35.2%
Corpus Christi, Texas	South	31.6%	32.3%
Danville, Va.	South	24.5%	29.6%
Decatur, Ill.	Midwest	27.0%	31.3%
Dubuque, Iowa	Midwest	31.5%	35.9%
El Paso, Texas	South	32.8%	36.6%
Erie, Pa.	Northeast	31.1%	35.1%
Eugene—Springfield, Ore.	West	37.5%	39.4%
Fort Myers—Cape Coral, Fla.	South	32.9%	37.2%
Fresno, Calif.	West	34.4%	36.9%
Goldsboro, N.C.	South	29.5%	36.3%
Grand Forks, N.D.—Minn.	West	38.5%	43.2%
Grand Junction, Colo.	West	34.1%	38.5%
Great Falls, Mont.	West	32.4%	36.3%
Greenville—Spartanburg—Anderson, S.C.	South	36.6%	40.1%
Harrisburg—Lebanon—Carlisle, Pa.	Northeast	34.2%	38.5%
Hartford, Conn.	Northeast	44.1%	48.2%
Honolulu, Hawaii	West	42.1%	45.4%
Houma, La.	South	22.8%	26.3%
Janesville—Beloit, Wis.	Midwest	27.9%	31.3%
Johnstown, Pa.	Northeast	23.1%	30.1%
Knoxville, Tenn.	South	36.2%	41.7%
La Crosse, Wis.—Minn.	Midwest	39.4%	44.1%
Lakeland—Winter Haven, Fla.	South	27.7%	31.2%
Las Vegas, N.V.—Ariz.	West	28.0%	33.7%
Lewiston—Auburn, Maine	Northeast	26.4%	29.2%
Lexington, Ky.	South	42.0%	46.7%
Lubbock, Texas	South	36.9%	38.6%
Macon, Ga.	South	31.2%	36.6%
Medford—Ashland, Ore.	West	33.0%	36.1%
Modesto, Calif.	West	29.4%	31.6%
Myrtle Beach, S.C.	South	31.7%	35.8%
Ocala, Fla.	South	25.7%	31.0%
Omaha, Neb.—Iowa	Midwest	39.4%	43.5%
Peoria—Pekin, Ill.	Midwest	33.4%	38.5%

Workforce Development

Metropolitan Statistical Area	Region	2000 Attainment	2009 Attainment
Providence—Fall River—Warwick, R.I.—Mass.	Northeast	40.5%	43.9%
Pueblo, Colo.	West	32.2%	38.5%
Punta Gorda, Fla.	South	28.5%	36.5%
Redding, Calif.	West	31.0%	33.5%
Rocky Mount, N.C.	South	27.4%	29.0%
Salt Lake City—Ogden, Utah	West	39.1%	42.1%
San Angelo, Texas	South	32.2%	33.5%
San Antonio, Texas	South	36.8%	38.8%
Scranton—Wilkes-Barre—Hazleton, Pa.	Northeast	29.4%	34.8%
Seattle—Tacoma—Bremerton, Wash.	West	44.7%	49.6%
Sheboygan, Wis.	Midwest	29.4%	34.2%
Shreveport—Bossier City, La.	South	29.7%	31.5%
Sioux City, Iowa—Neb.	Midwest	29.7%	34.8%
Springfield, Mo.	Midwest	32.3%	35.9%
St. Cloud, Minn.	Midwest	32.8%	36.4%
Stockton—Lodi, Calif.	West	31.1%	34.3%
Sumter, S.C.	South	30.9%	33.9%
Tampa—St. Petersburg—Clearwater, Fla.	South	35.6%	38.6%
Visalia—Tulare—Porterville, Calif.	West	28.9%	30.4%
Waco, Texas	South	34.2%	37.1%
Waterloo—Cedar Falls, Iowa	Midwest	35.0%	39.2%
Youngstown—Warren, Ohio	Midwest	24.4%	27.4%
Yuba City, Calif.	West	30.5%	35.9%
Yuma, Ariz.	West	25.4%	28.4%

Source: ACS 2000 and 2009. Author's calculations.

APPENDIX C

Explanation of Analytic Models

Two models were developed for this report. The first model estimated the 2009 attainment rate of adults in a given MSA. The model is expressed by the following equation:

$$Y_{it} = \beta X_{it} * \omega + \beta Z_{it} * \omega + \beta S_t + j_t + \varepsilon_{it}$$

Where Y measures the degree attainment rate in metropolitan area, i, during time t. Demographic shifts and labor market characteristics are represented by X and Z, respectively. The model also includes several state-based variables, S, that are fixed for MSAs in the same state. For MSAs that cross multiple jurisdictions, the state where the core city is located is used. All other state-level variation not quantified by these variables is captured with j, which is also fixed, with the remaining unaccounted for variation absorbed by the error term, ε.

The second model estimated the percentage point change in degree attainment from 2000 to 2009. All variables that are fixed over time can be dropped, leaving the following equation:

$$Y_i = \beta X_i * \omega + \beta Z_i * \omega + \varepsilon_i$$

Both models are weighted by the MSA's population size in 2009, represented by ω. The results produced several important insights about the types of programs and policies that may be most suitable in these areas given not only the level of educational need, but also the demographic, economic, and higher education conditions within these spaces.

APPENDIX D

Examples of Existing Interventions

The examples below are existing interventions that could serve as models for future funding opportunities given the needs of the metropolitan spaces in each quadrant. Inclusion of these programs does not represent an endorsement by either the funder of this report or the Institute for Higher Education Policy. They are mentioned for illustrative purposes only.

TARGETED PROGRAMS

Examples of existing interventions that could serve as models for future funding opportunities in *Targeted Programs* metropolitan spaces include the following:

- **Partners for Postsecondary Success**: Partners for Postsecondary Success is a three-year demonstration project to establish or strengthen community partnerships focused on improving postsecondary completion rates and connecting low-income young adults with postsecondary credentials to local labor market needs.

For additional information on Partners for Postsecondary Success, please visit: http://www.mdcinc.org/docs/Project-Summary.pdf.

- **Undergraduate Transfer Scholarships**: The Jack Kent Cooke Foundation's Undergraduate Transfer Scholarship provides funding to outstanding community college students with financial need to transfer to and complete their bachelor's degrees at the nation's top four-year colleges and universities.

For additional information on Undergraduate Transfer Scholarships, please visit: http://www.jkcf.org/scholarships/undergraduate-transfer-scholarships/.

- **The Undergraduate Research Opportunity Program**: Hosted at the University of Michigan, this program is a national award-winning program that creates research partnerships between first- and second-year students and University of Michigan faculty and research scientists.

For additional information on the Undergraduate Research Opportunity Program, please visit: http://www.lsa.umich.edu/urop/about.

CAPACITY BUILDING

Examples of existing innovations that serves as appropriate models for future funding opportunities in *Capacity Building* metropolitan spaces include the following:

- **Developmental Education Initiative**: This initiative partners with 15 Achieving the Dream colleges to improve the effectiveness of developmental instruction

offered at two-year colleges so students can progress into college-level courses, complete them, and gain a certificate or degree in a timely manner.

For more information about at the Developmental Education Initiative, please visit: http://www.deionline.org/.

- **Advanced Technological Education**: Administered by the National Science Foundation, Advanced Technological Education grants support curriculum development; professional development of college faculty and secondary school teachers; career pathways from secondary schools to two-year colleges and from two-year colleges to four-year institutions; and other activities.

For more information about Advanced Technological Education, please visit: http://www.nsf.gov/awardsearch.

LARGE-SCALE INVESTMENT

An example of an existing program that serves as an appropriate model for future funding opportunities in *Large-Scale Investment* metropolitan areas is:

- **Advancement Via Individual Determination**: This initiative is a college-readiness program designed to provide students from underrepresented groups with the tools to succeed in college-preparatory courses and enroll in four-year colleges.

For additional information on Advancement Via Individual Determination, please visit: http://www.avid.org/about.html.

WORKFORCE DEVELOPMENT

Examples of existing programs that serves as appropriate models for future funding opportunities in *Workforce Development* metropolitan areas include:

- **Higher Income Requires Education (HIRE) Forum**: The HIRE Forum unites postsecondary institutions in the multistate Louisville region to address community economic development challenges by bridging the gap between institutions and business, and focusing on increasing postsecondary completion rates.

For additional information on the HIRE Forum, please visit: http://www.greaterlouisville.com/hire/.

- **Shifting Gears**: Shifting Gears is a multi-year state policy initiative to promote regional economic growth by improving educational outcomes and skill acquisition of the workforce and to create pathways to college and labor market success for low-income working adults.

For additional information on Shifting Gears, please visit: http://www.shifting-gears.org.

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